



**MCI Telecommunications
Corporation**

1801 Pennsylvania Avenue, NW
Washington, DC 20006
202 887 2779
FAX 202 887 2204

Donald H. Sussman
Regulatory Analyst
Federal Law and Public Policy

RECEIVED

OCT 26 1998

ORIGINAL FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

October 26, 1998

Ms. Magalie R. Salas
Secretary
Federal Communications Commission
Room 222
1919 M Street, N.W.
Washington, D.C. 20554

**Re: In the Matter of Access Charge Reform, CC Docket No. 96-262; Price Cap
Performance Reform for Local Exchange Carriers, CC Docket No. 94-1;
Consumer Federation of America, Petition for Rulemaking, RM-9210**

Dear Ms. Salas:

Enclosed herewith for filing are the original and four (4) copies of MCI WorldCom's Comments regarding the above-captioned matter.

Please acknowledge receipt by affixing an appropriate notation on the copy of the MCI WorldCom Comments furnished for such purpose and remit same to the bearer.

Sincerely yours,

Don Sussman

Enclosure
DHS

No. of Copies rec'd
List A B C D E

028

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

ORIGINAL

In the Matter of:

Access Charge Reform

**Price Cap Performance Review for
Local Exchange Carriers**

**Consumer Federation of America,
Petition for Rulemaking**

)
)
) **CC Docket No. 96-262**
)
) **CC Docket No. 94-1**
)
)
)
) **RM-9210**

RECEIVED

OCT 26 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

MCI WORLDCOM, INC. COMMENTS

**Don Sussman
Alan Buzacott
Chris Frentrup
Henry G. Hultquist
Elizabeth A. Yockus
Richard S. Whitt
Mary L. Brown
MCI WORLDCOM, Inc.
1801 Pennsylvania Avenue, NW
Washington, DC, 20006
(202) 887-2779**

**Its Consultant:
Andrew Regitsky
Regitsky & Associates
12013 Taliesin Place, Suite 32
Reston, VA 20190
703-787-6735**

October 26, 1998

Summary	i
I. Introduction	1
II. "Market-Based Reform" of Interstate Access Charges Has Not Materialized	6
A. Exchange Access Competition Has Stalled	6
B. RBOC Earnings Have Increased Since Passage of the Telecommunications Act of 1996	9
C. Competition Through Unbundled Network Elements Has Been Stalled	11
D. Widespread Facilities Based Competition Is Restrained by CLEC Financial Limitations, Resource Constraints, and Anti-Competitive ILEC Practices	18
III. Access Charges Must Be Reduced to Forward-Looking Economic Cost	22
A. The Commission Has Acknowledged The Economic Benefits And Legal Justifications For Reducing Access Charges To Economic Cost	22
B. A Commission Failure To Immediately Reduce Access Charges to Cost Based On The Current Market Condition Would be Arbitrary And Capricious ...	25
C. The Lack of a Cost Model, And Concerns About Universal Service and Incumbent LEC Business Operations Are Not Valid Reasons to Continue Inflated Above-Cost Access Charges	25
IV. MCI WorldCom Recommended Action for Access Reform	27
A. Productivity Discussion	27
1. The Commission's Total Factor Productivity Study Should Be Based on Interstate, Not Total Company, Results	27
2. The ILECs' Continuing Increase in Earnings under the Commission's TFP-based X-Factor Is Proof That Total Company TFP Is a Biased Estimator	29
3. ILEC Shareholders Have Received the Majority of the Benefits of Price Caps	31
4. Increasing ILEC Earnings under Price Caps Are Even More Unreasonable in Light of Their Declining True Cost of Capital	33
5. The Commission must Make a One-time Adjustment to the Price Caps to Reflect its Revised X Factor	35
V. Additional ILEC Pricing Flexibility at this Time Is Unwarranted and Would Have Anticompetitive Effects	36
A. Ameritech	39
1. Zone Structure	39
2. Discount Plans	39
B. Bell Atlantic-South	39
1. Zone Structure	39
2. Discount Plans	39
C. Bell Atlantic - North (NYNEX)	40
1. Zone Structure	40

D.	BellSouth	40
1.	Zone Structure	40
E.	Pacific Bell	41
1.	Zone Structure	41
2.	Discount Plans	41
F.	SBC	42
1.	Zone Structure	42
2.	Discount Plans	42
G.	US West	42
1.	Zone Structure	42
2.	Discount Plans	43
VI.	MCI WorldCom Recommended ILEC Pricing Flexibility Proposal	43
A.	The Commission's Pricing Flexibility Framework Should Distinguish Between Transport and Switched Access Services	45
B.	Pricing Flexibility for Transport Services	48
1.	Overview	48
2.	Geographic Areas for Applying the Substantial Competition Standard ..	49
3.	Competitive Showing/Substantial Competition Standard	50
4.	Procedural Issues	57
5.	Intermediate Pricing Flexibility Is Not Required	57
C.	There is No Need for the Commission to Establish a Switched Access Pricing Flexibility Framework	59
D.	The Commission Should Reject the Ameritech and Bell Atlantic Proposals ...	60
1.	The Bell Atlantic and Ameritech Proposals Would Grant Contract Pricing Authority Prematurely	61
2.	Many of the Pricing Flexibility Measures Proposed by the ILECs Should Not be Permitted Prior to a Finding of Nondominance	62
3.	The ILECs' Proposed "Triggers" Are Inadequate Indicators of Competition	64
4.	The X Factor Should Not Be Reduced As Competition Increases	65
VII.	Conclusion	66

Summary

Eighteen months ago, the Commission decided that despite the serious and harmful consequences of excessive access charges for consumers and for competition in telecommunications markets, competition in local exchange and exchange access markets would shortly bring about significant access reductions. Neither the competition nor the reductions have materialized. Instead, through seemingly endless litigation and their consistent failure to comply with statutory duties to provide interconnection and access to unbundled network elements on nondiscriminatory terms and conditions, the ILECs have been able to maintain the type of financial results that only monopolists can achieve. It is now time for the Commission to prescribe a cost-based reduction of approximately \$10 billion in the ILECs' access charges. This action should be taken no later than the date on which an explicit universal service fund is implemented.

To accomplish this prescription, the Commission should immediately open a supplementary proceeding to establish forward-looking cost levels for access services, by inviting parties to submit forward-looking economic cost models for Commission review. The Commission should also modify its price cap formula and change the productivity factor to 9.2%, which would more accurately reflect ILEC interstate productivity going forward than the current 6.5%. In addition, the Commission should make a one-time adjustment and require the ILECs to reflect the 9.2% productivity factor back to 1995. Increasing the productivity offset to 9.2% and making it retroactive to 1995 would not by itself move access rates to cost. It would result in an estimated \$2.6 billion rate cut. MCI WorldCom urges the Commission to reduce access by a full

\$10 billion to reflect true economic cost.

This action is particularly appropriate in light of the fact that the ILECs' true cost of capital is now approximately 9.1%, much lower than the 11.25% target that was in place at the start of price caps. Accordingly, the Commission should also make a downward change to the low end adjustment mechanism to reflect the true cost of capital.

Given the absence of substantial exchange and exchange access competition, the Commission should grant no additional pricing flexibility to the ILECs at this time. However, it would be in the public interest for the Commission to establish a future framework for additional flexibility for transport services, conditioned on the presence of "substantial competition." In establishing such a framework, the Commission must ensure that customers located in areas where competition is not substantial, are protected from the exercise of ILEC monopoly power. Similarly-situated access customers must have access to the same rates, terms, and conditions.

The examination of whether there is "substantial competition" in the appropriate geographic market will entail an analysis of several factors, including demand elasticity, supply elasticity, market share, and the incumbent's pricing behavior. In order to streamline the process of evaluating ILEC petitions for additional pricing flexibility, the Commission should establish in advance certain necessary, but not sufficient, indicators of "substantial competition." These include:

- Nonrecurring charges associated with rearrangements to competitors' facilities are waived;
- Fresh look for term plans;
- Collocation priced at forward looking economic cost;

- Unbundled loops available at geographically deaveraged forward looking economic cost;
- Functional OSS, permitting competitors to order elements in necessary quantities;
- CLECs collocated in offices serving 90% of DS1 channel terminations in the geographic area;
- Shared Transport UNE available;
- CLECs have 50 percent market share of revenues or DS1 channel terminations from end offices to customer premises.

In no case should the Commission treat ILEC transport services as nondominant without finding that the ILEC lacks market power in the local exchange and exchange access market. It is unnecessary at this time to establish a framework for switched access flexibility, since substantial competition for these customers is unlikely to develop in the near term.

The Commission can be certain that if there were substantial exchange access competition, MCI WorldCom would take advantage of it. No carrier is as well-positioned as MCI WorldCom to make use of competitive access arrangements. MCI WorldCom is the second-largest interexchange carrier and the CLEC with the greatest reach and most facilities. Yet MCI WorldCom has so far been able to migrate only a tiny fraction of its traffic off of the monopolists' access networks.

Competition cannot reduce access charges until competitors are able to offer widespread alternatives to the ILECs' monopoly services. The past three years have shown that this will take a substantial amount of time and the investment of many billions of dollars. In the meantime, there is no justification for continuing to allow the ILECs to receive access revenues that are \$10 billion in excess of the cost to provide the service.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of:)	
)	
Access Charge Reform)	CC Docket No. 96-262
)	
Price Cap Performance Review for Local Exchange Carriers)	CC Docket No. 94-1
)	
Consumer Federation of America, Petition for Rulemaking)	RM-9210

MCI WORLDCOM, INC. COMMENTS

I. Introduction

In its Public Notice released October 5, 1998,¹ the Commission seeks comment on an issue which has emerged as one of the principal battlegrounds in the fight to wrest monopoly control of local exchange and exchange access services from incumbent local exchange carriers (ILECs) -- access charges. Access charges represent the ILECs' most profitable revenue stream, enabling ILECs to collect earnings of nearly 70 percent before interest, taxes, depreciation, and

¹ Commission Asks Parties to Update and Refresh Record for Access Charge Reform and Seeks Proposals for Access Charge Reform Pricing Flexibility, CC Docket No. 96-262, CC Docket No. 94-1, CC Docket No. 97-250, RM-9210, Public Notice, FCC 98-256, released October 5, 1998.

amortization, a level nearly unmatched among legal businesses.² In fact, today's access charges are approximately \$10 billion over their true economic cost.

So profitable is the ILEC access revenue stream that any attempts by state and federal regulators over the last two years to provide competitive inroads that would allow new entrants to capture more than a minuscule share of this revenue stream have been quashed. Most of this activity has involved neutralizing the use of unbundled network elements, which allows new entrants to compete for access charge revenues. Weapons that the ILECs have deployed include litigation to eliminate the federal requirement of providing unbundled elements in combination, inadequate or nonexistent operational support systems for network elements, and lack of performance standards to ensure that new entrants can provide quality service. ILECs have also stalled the new entrants' ability to interconnect their own networks, which is today the only practical vehicle new entrants have to compete to provide access services. Among other things, the ILECs have delayed or stalled completion of interconnection contracts, failed to provision sufficient interconnection trunks, or failed to resolve the issues associated with making NXXs available to new entrants.

The result is that after more than two and a half years since the passage of the Telecommunications Act of 1996, and a year and a half since the Commission initiated "market-based" reform of access charges, there is no competitive source of supply for exchange access service, and the ILECs retain their grip on their \$24 billion access revenue stream. In fact, ILEC revenues are up, interstate earnings are up, and ILEC access minutes and lines are growing.

² Compare the access EBITDA of close to 70 percent, with a local services EBITDA of approximately 22 percent.

When the Commission last addressed the issue of access reform, it had not yet resolved a central question in the access debate -- the extent to which above-cost access supports affordable local service. In the absence of resolving this critical question, the Commission chose to take a small "bite" out of access by increasing somewhat the productivity offset in the price cap formula. Today, in light of the substantial progress made by the Commission to size the support necessary for universal service,³ and the Commission's plan to decrease access charges by the same amount and instead fund universal service through an explicit revenue tax on all carriers,⁴ there is no legal or policy reason to allow above-cost access charge levels to persist. At a date no later than the date on which an explicit universal service fund is implemented, access charges must be brought to cost.

MCI WORLDCOM, Inc. (MCI WorldCom) advocates the following measures be adopted by the Commission in resolving the issues before it in the above-captioned dockets and proceedings:

- ▶ Access charges must be brought to cost on a date no later than the date on which an explicit universal service fund is implemented.
- ▶ The Commission should immediately open a supplementary proceeding to establish forward-looking cost levels for access, by inviting parties to submit forward-looking

³ See Commission Adopts Model Platform for Use in Determining Universal Service Support for High Cost Areas, CC Docket Nos. 96-45 and 97-160, Report No. 98-36, released October 22, 1998.

⁴ See Federal-State Joint Board on Universal Service, Report and Order, CC Docket No. 96-45, FCC 97-157, 12 FCC Rcd 8776 (rel. May 8, 1997).

economic cost models for Commission review.⁵

- ▶ The Commission should modify its price cap formula to reflect true interstate productivity which, using the studies accepted by the Commission in 1997, equates to a productivity offset of 9.2%, this will ensure that going-forward, access rates will continue to be based on the ILECs' ever-improving cost structure which results from persistent and substantial productivity gains. This change would reduce access charges by approximately \$650 million. The Commission should also require a one-time adjustment back to 1995 based on the higher productivity factor. This would yield an additional access reduction of approximately \$2.6 billion.
- ▶ Prescription of the cost of capital to 9.1% using the methodology that was extensively briefed and successfully defended in the most recent cost of capital examination, along with a downward adjustment in the low end adjustment mechanism.
- ▶ Decline to grant of any additional access pricing flexibility for ILECs at this time, since additional flexibility would negatively impact the development of competition for exchange access services.
- ▶ Define a future framework for additional transport flexibility for ILECs, conditioned on the presence of "substantial" competition for transport as a prerequisite. This would have beneficial results in that it will prevent "ad hoc" filings that add to the Commission's

⁵ In this respect, MCI WorldCom urges the Commission to depart from its earlier-articulated plan to collect cost "studies", which are ILEC-by-ILEC studies of ILEC-specific cost. Such studies are inconsistent with incentive-based regulation and have not been demonstrated to be necessary in establishing analogous cost elements for local interconnection purposes. Properly-designed econometric cost models are a much more efficient way to adjudicate forward-looking costs.

administrative burdens without the potential for a corresponding public benefit. Any flexibility granted in the future must ensure that similarly-situated access customers will have access to the same rates, terms and conditions, to prevent any discrimination that would undermine the operation of the vibrantly competitive interexchange industry.

- ▶ Nondominant treatment for ILEC transport services must be based on a comprehensive examination and finding that the ILEC lacks market power.
- ▶ For switched access, which is inextricably tied to an end user's ability to choose a local service provider, the lack of any viable local exchange competition makes the consideration of increased pricing flexibility inconceivable, and no framework is necessary or desirable at this time.

If any carrier could and would take advantage of opportunities for competition in exchange access services, it would be MCI WorldCom. As the second-largest interexchange carrier, MCI WorldCom's access volumes would, in a competitive access environment, allow us to migrate our traffic to our own or other new entrant's networks. As a competitive local exchange carrier with the largest geographic reach and most network facilities, we should have the ability to place access minutes on our own network and establish competition in the sale of access services. Unfortunately, our ability to move access minutes off of ILEC networks and on to our own or other new entrants' networks is sharply constrained -- by the roadblocks to local competition as well as by ILEC access practices, terms and conditions that are designed to make it difficult for interexchange carriers (IXCs) to migrate access to other vendors.

The Commission has an historic opportunity to take action in these dockets to correct by regulatory action what the market has demonstrated it cannot do, bring access to cost. The

Commission has repeatedly recognized the harms that above-cost access creates.⁶ The Commission should not through inaction miss the opportunity to eliminate these harms.

II. "Market-Based Reform" of Interstate Access Charges Has Not Materialized

A. Exchange Access Competition Has Stalled

In the Public Notice released October 5, 1998, the Commission asks interested parties "to update and refresh" the records of the above-referenced dockets to reflect developments since the Commission adopted the Access Charge Reform Order⁷ and the Price Cap Review Order⁸ on May 7, 1997. In the Access Charge Reform Order, the Commission recognized that interstate access charges were significantly above their forward-looking cost levels, and that these inflated access charges suppressed demand for interstate interexchange services, impeded the efficient development of competition in the local and long distance markets, and retarded economic growth. To address the inflated level of access charges, in the Access Charge Reform Order the Commission selected a "market-based" approach to access reform. The Commission's choice of

⁶ See, e.g., Access Reform Order for a discussion of the deleterious effects of above-cost access charges on demand for interexchange services, development of competition in local and long distance markets, and economic growth.

⁷ Access Charge Reform, CC Docket No. 96-262 et al., First Report and Order, 12 FCC Rcd 15982 (1997)(Access Charge Reform Order), aff'd sub nom. Southwestern Bell Tel. Co. v FCC, ___ F.3d ___ (8th Cir., Aug. 19, 1997); Order on Reconsideration, 12 FCC Rcd 10119 (1997), Second Order on Reconsideration and Memorandum Opinion and Order, 12 FCC Rcd 16606 (1997).

⁸ Price Cap Performance Review for Local Exchange Carriers, Access Charge Reform, Fourth Report and Order, CC Docket No. 94-1 and Second Report and Order, CC Docket No. 96-262, 12 FCC Rcd 16642 (1997) (Price Cap Review Order).

the “market-based” approach was based on its prediction that substantial competitive entry into the local services market would occur and that this competitive entry would quickly exert downward pressure on ILEC access charges. The Commission believed that “[t]he 1996 Act removes barriers to entry in the local market, generating competitive pressures that make it difficult for incumbent LECs to maintain access charges above economic cost.”⁹ In the Price Cap Review Order, the Commission revised its methodology of calculating the price cap productivity factor (X Factor), which resulted in an increased X Factor of 6.5 percent, well below the levels that MCI believed were necessary to correctly recognize productivity.

As the Consumer Federation of America correctly pointed out in its Petition for Rulemaking,¹⁰ and as MCI demonstrated in its May 1998 report entitled “Absence of Competition in the Exchange Access Market,”¹¹ meaningful levels of exchange access and exchange telephone service competition have not developed, and will not develop in the foreseeable future.¹² The MCI report shows that, one year after the Commission adopted its Access Charge Reform Order, and two years after the adoption of the Local Competition

⁹Access Charge Reform Order at ¶32.

¹⁰ Consumer Federation of America et al., Petition for Rulemaking, RM-9210, December 9, 1997.

¹¹ See Ex Parte in Access Charge Reform, CC Docket No. 96-262; Consumer Federation of America, International Communications Association and National Retail Federation Petition Requesting Amendment of the Commission’s Rules Regarding Access Charge Reform and Price Cap Review for Local Exchange Carriers, RM 9210, May 7, 1998.

¹² Consumer Federation of America Petition at 2.

Order,¹³ unbundled network elements (UNEs) were far from a “ubiquitous” substitute for access services. Competitive local exchange carriers (CLECs) offering commercial service were limited to using their own geographically-limited facilities or, to a lesser degree, their own facilities in combination with ILEC loops. In fact, unbundled loops as a service delivery method accounted for less than 0.1 percent of Regional Bell Operating Company (RBOC) and GTE access lines.¹⁴

Today, six months after that report was initially filed with the FCC, and 18 months after the Commission adopted its Access Charge Reform Order and Price Cap Review Order, the competitive landscape for interstate access charges has remained virtually unchanged. Interstate access charges remain approximately \$10 billion above forward-looking economic cost, and virtually all IXC exchange access continues to originate and terminate on ILEC facilities.

¹³ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499 (1996)(Local Competition Order), at ¶1980 Order on Reconsideration, CC Docket No. 96-98, 11 FCC Rcd 13042 (1996), petition for review pending and partial stay granted, sub nom. Iowa Utils. Bd. v. FCC, 109 F.3d 418 (8th Cir. 1996).

¹⁴ Of a total of 144.5 million access lines, only 123,680 have been sold to CLECs as unbundled elements. As a measure of how insignificant this figure is, the RBOCs and GTE are expected to add 6 million access lines between 1997 and 1998. "Absence of Competition in the Exchange Access Market," May 7, 1998. Additionally, because of the capital-intensive nature of facilities construction, CLEC networks simply do not have the necessary reach to compete. CLEC transmission facilities are less than 1/1000th of ILEC total transmission facilities, and CLEC networks are connected to at most 0.33 percent of the nation's commercial buildings and virtually no residential buildings. Id. As a result, facilities-based entry has no chance of exerting competitive pressure on ILEC access charges in the foreseeable future.

RBOC Exchange Access Market Share Based on Access Lines¹⁵

	1996	1997	2Q1998
Ameritech	99.40%	99.13%	98.66%
Bell Atlantic	99.32%	98.99%	98.44%
BellSouth	99.45%	99.08%	98.17%
SBC	99.56%	99.07%	98.64%
USWest	99.63%	99.00%	98.21%

It is time to suspend the failed experiment of allowing the market to reduce the charges of monopolists. The Commission should prescribe forward-looking cost-based access charges as long as the ILECs retain monopoly power.

B. RBOC Earnings Have Increased Since Passage of the Telecommunications Act of 1996

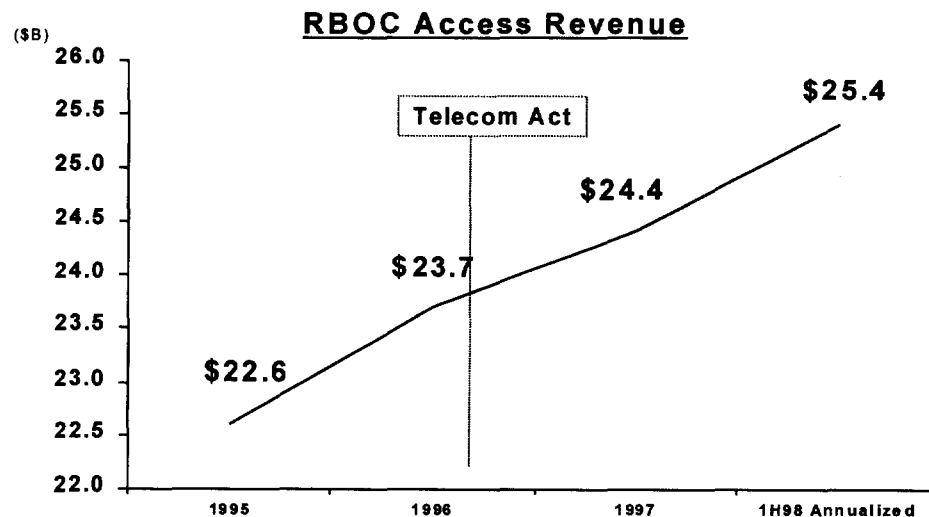
While RBOCs attempt to paint themselves as upstarts or new entrants,¹⁶ or as carriers that have suffered irreparable harm by Congress' and regulators' actions aimed at opening up local markets to competition, RBOC earnings continue to demonstrate that access reductions to date, and the limited presence of new local entrants, have not negatively impacted the RBOCs

¹⁵ Data for 1996 and 1997 RBOC market share from "Absence of Competition in the Exchange Access Market," page 5, table 4. Market share data for 2Q1998 is based on MCI WorldCom market research.

¹⁶ Recently, in order to gain sympathy for their pending \$62 billion merger, SBC and Ameritech executives attempted to paint their companies as upstarts that are trying to compete with "behemoth" IXC's. Referring to Comments made by Ameritech General Counsel Kelly Walsh, October 14, 1998.

financially. The fact is, the RBOCs are among the largest companies, operating in one of the most profitable industry segments in the world.¹⁷

Moreover, as the tables in Appendix A demonstrate, the RBOCs continue to report record monopoly profits,¹⁸ and average RBOC profitability has increased continually since passage the Telecommunications Act. Additionally, as the two tables below demonstrate, not only have RBOC access revenues increased steadily since passage of the Telecommunications Act, but the margins on those services have increased.¹⁹



¹⁷ See tables in Appendix A.

¹⁸ All RBOC and IXC figures have been normalized, and excluded one time charges. IXC includes AT&T, MCI, and Sprint. Sprint long distance only for EBITDA; consolidated for Net Income. See Appendix A for individual RBOC earnings information.

¹⁹ Data on RBOC Earnings compiled from FCC Report 4303, FCC Preliminary Statistics of Common Carriers 1997, FCC Report 4302, Dial Equipment Minute Report (1996 as proxy for 97), Company Annual Reports, and 10-K's.

RBOC Regulated Financials Comparison 1996/1997

	Local	Access	Toll	Misc.	Total
Net Revenue (in Billion \$)					
1997	47.3	28.5	8.4	9.7	93.7
1996	45.1	27.6	9.3	9.6	91.6
EBITDA (in Billion \$)					
1997	12.16	20.0	5.0	3.7	40.6
1996	9.8	19.2	5.9	4.8	39.8
EBITDA %					
1997	25.7	69.6	60.2	37.9	43.3
1996	21.8	69.4	63.2	50.7	43.3

Consumers have waited long enough for the benefits of lower access charges. Given the extensive and irrefutable evidence of continued ILEC monopoly power in the exchange access market, the Commission should prescribe cost-based rates now.

C. Competition Through Unbundled Network Elements Has Been Stalled

The Commission adopted its “market-based” approach to access reform in the belief that “the pro-competitive regime created by the 1996 Act, and implemented in the Local Competition Order and numerous state commission decisions, will generate competition over the next few

years.”²⁰ Eighteen months later, ILECs maintain a near-total monopoly on the provision of local exchange and exchange access services. In the words of the recent Final Staff Report of the California PUC, “[l]ocal competition is floundering at the present time.”²¹ Or, as an Administrative Law Judge in Pennsylvania put it: “[Bell Atlantic’s] request to have all business services declared competitive, while holding a market share in the business local exchange service market in excess of 90%, borders on the ridiculous.”²² Several factors have limited the pace of competitive inroads. Most importantly, events have shown that the establishment of significant competition will remain an elusive goal without the cooperation and commitment of the incumbent monopolists.

Under the 1996 Act, competitors may use three basic methods to enter local markets: resale of ILEC services; use of unbundled network elements; and interconnection of CLEC facilities with the incumbents’ networks. Even if resale were not a failed entry strategy,²³ since the incumbent continues to provide and bill the associated exchange access services, it would provide no competitive source of supply for exchange access. . . The construction of sufficient competitive facilities to permit widespread entry, will require an immense investment of time

²⁰ Access Charge Reform Order at ¶ 269.

²¹ Final Staff Report: Pacific Bell and Pacific Bell Communications Notice of Intent to File Section 271 Application for InterLATA Authority in California, released October 5, 1998.

²² Recommended Decision, Petition of Bell Atlantic - Pennsylvania, Inc., Docket No. P-00971307, released July 24, 1998.

²³ Even the RBOCs now admit that, given the paltry discounts, competitive local service cannot be provided economically via resale. See, e.g., In the Matter of GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer of Control, Application For Transfer Of Control, at p. 30, October 2, 1998.

and capital. This leaves UNEs as the only hope for substantial, near-term exchange access competition. Yet UNE-based competition remains in its infancy -- its development arrested by litigation and the failure of ILECs to provide access to UNEs on nondiscriminatory terms and conditions.

The Commission's Local Competition Order was intended to establish the pro-competitive ground rules upon which competitors and incumbents would negotiate their interconnection agreements. Instead, the parties negotiated against a background of uncertainty, with some provisions of that Order subject to judicial stay and many others ensnared in litigation before the 8th Circuit Court of Appeals. By the time that Court resolved the first set of issues, nearly ten months had passed.²⁴ To make matters worse, the Court's decision created as much uncertainty as it resolved.²⁵ On two important issues, pricing and UNE combinations, the court rejected the Commission's procompetitive rules and cast a cloud of uncertainty over ongoing interconnection negotiations

On pricing, the Commission had required state arbitration decisions to comply with a forward-looking, total element long-run incremental cost ("TELRIC") standard and to deaverage loop rates. Ultimately, nearly every state and federal court that has examined the issue has agreed with the Commission that the statute requires the use of a forward-looking standard to determine UNE prices. However, one cannot overlook the delay that resulted from the need to

²⁴ Iowa Utilities Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997) amended on reh'g, 1997 U.S. App. LEXIS 28652 (8th Cir. Oct. 14, 1997), cert. granted, 118 S.Ct. 879 (1998).

²⁵ E.g., in North Carolina, GTE responded to the 8th Circuit's decision by filing comments with the state Utilities Commission seeking the modification or deletion of nearly three-hundred sections of its interconnection agreement with MCI.

revisit this issue in every state. Moreover, in some cases, states have adopted non-recurring charges (NRCs) and UNE prices that are not consistent with the TELRIC standard. Nor have states universally deaveraged loop rates. The failure to adhere to the TELRIC standard for NRCs, as well as the failure to deaverage loop rates, has critically harmed the development of UNE-based competition. California provides a good example of both problems. Pacific Bell does not offer deaveraged loop rates, and imposes loop-related NRCs that make UNE-based competition uneconomical.²⁶

In addition to overturning the Commission's pricing guidelines, the 8th Circuit also invalidated the Commission's rules on UNE combinations. The Commission had interpreted the 1996 Act to prevent ILECs from needlessly separating UNEs that are already combined in their networks, and to require them to combine UNEs on behalf of competitive local exchange carriers (CLECs) when to do so is technically feasible. The 8th Circuit found that the plain language of the statute permits incumbents to separate precombined elements, and requires CLECs themselves to combine any UNEs that they require in combination.²⁷ The court concluded its analysis by saying that "the fact that the ILECs object to this rule indicates to us that they would rather allow entrants access to their networks than have to rebundle the unbundled elements for them."²⁸ Of course, the last thing that the incumbents had in mind was allowing competitors

²⁶ The total NRC for a new loop from Pacific Bell is \$448.98. If one assumed an expected customer life of 48 months, a charge of nearly \$10 per month would be needed to recover the NRC. When added to the recurring UNE rates and other costs, the price that a CLEC would need to set would be far above the comparable rate charged by Pacific Bell.

²⁷ Iowa Utilities Bd. at 813-815.

²⁸ Id. at 813.

access to their networks.

The impact on competition of the 8th Circuit's UNE combination decision cannot be overstated. ILECs have used this decision to delay competition for the past fifteen months. The Commission's Local Competition Order had the potential to foster more rapid development of competition in many places. Instead, incumbents have placed onerous requirements on competitors who would provide service via UNE combinations. Principally, they have required competitors to purchase expensive collocation in each central office in order to needlessly disconnect and cross-connect various UNE configurations. This creates unnecessary uncertainty, delay, and cost, as well as degraded service quality.²⁹ As the Commission found in its recent decision on BellSouth's 271 application for Louisiana, collocation is legally insufficient as the only means of providing competitive LECs with access to UNEs.³⁰ Without the establishment of nondiscriminatory methods to access UNE combinations, competitors will have no choice but to rely on their own limited facilities, and consumers will mostly have no choice at all for a very long time. Without local competition, there can be no exchange access competition, and the market-based approach will guarantee continued distortion of the market for long distance services, as well as excessive profits for the incumbent monopolists.

In addition to the uncertainty and delay created by litigation over the Local Competition Order, contentious arbitration proceedings and subsequent litigation have also contributed to the

²⁹ As further explained below, the incumbents' collocation charges are many times in excess of the forward-looking economic cost of the service.

³⁰ In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121.

undeveloped state of local competition. It cannot be doubted that the incumbents have treated these proceedings as vehicles for frustrating the entry plans of CLECs. As one U.S. District Court judge said of Southwestern Bell:

SWBT's penchant for rehashing issues that had already been fully briefed, raising arguments and claims that did not appear in even the most generous reading of the Amended Complaint, and, most importantly, taking positions in this litigation that it had expressly disavowed in the PUC administrative hearing, were, to say the least, distressing. The voluminous briefing in this case-over seven hundred pages total - could have been cut in half had SWBT not fought tooth and nail for every single obviously non-meritorious point. Suffice it to say that every conceivable objection SWBT could have raised to the interconnection agreements was, in fact, raised here and fully briefed by all parties to the lawsuit.³¹

This type of behavior has made a significant contribution to the continued paucity of exchange and exchange access competition.

UNE-based competition has also been harmed by the relationship between UNE prices and the regulated price of local exchange service from the incumbent. In many cases, the combination of recurring and non-recurring charges for UNEs and collocation makes the provision of UNE-based service uneconomical. As discussed above, this is certainly true in California, where excessive NRCs create a nearly insurmountable barrier to competition.

Ultimately, local competition requires the cooperation and commitment of the ILECs. Only they can develop the wholesale products, systems, interfaces, and trained personnel that competitors will depend on to produce the open market sought by the 1996 Act. As this Commission's string of rejections of RBOC 271 applications shows, so far the incumbents have failed to provide competitors with the tools that are needed. Moreover, the incumbents have not

³¹ Southwestern Bell Telephone Co. v. AT&T Communications of the Southwest, Inc., 1998 US Dist LEXIS 15637 (US Dist. Court W. Dist. of Texas, 1998) at 55.

always approached their duties under the 1996 Act in the spirit of cooperation. As a recent Final Staff Report of the California PUC said of Pacific Bell: "Pacific often chooses solutions based on Pacific's determination of whether it complies with Section 271 requirements, not based on how effective they might be in promoting competition."³² This do-the-bare-minimum attitude does not contribute to the effective removal of the many obstacles in the path of the development of exchange and exchange access competition.

The fact that none of the RBOCs has even come close to obtaining 271 approval to enter the long distance market, starkly illustrates the incumbents' continued failure to comply with their most basic duties under section 251 of the 1996 Act. Indeed, the Commission's recent rejection of BellSouth's second Louisiana application, and third overall, provides a case study in the myriad ways, some subtle, some not-so-subtle, by which the incumbents have created obstacles to successful UNE-based competition. The Commission found that BellSouth's application satisfied more than six items on the checklist, more than any other 271 application to date, yet on numerous items that are critical for competition, the application came up woefully short. These include: OSS and associated reporting, access to UNEs and methods of combining UNEs, unbundled loops, unbundled switching, unbundled transport, resale, directory assistance, operator services, and number portability. With this record of noncompliance, it is unsurprising that BellSouth retains a virtually unchallenged monopoly in the provision of exchange and exchange access services. Moreover, no RBOC has demonstrated compliance with its statutory duties. Without full compliance, widespread competition, particularly UNE-based competition

³² Final Staff Report at 5.

which depends heavily on incumbent cooperation, will not take root.

Eighteen months ago, the Commission determined that substantial exchange access competition would shortly make it unnecessary to prescribe cost-based access charges. Such competition has not materialized. Instead, the industry has been sidetracked by seemingly endless litigation and incumbent intransigence in complying with their statutory duties to provide competitors with a meaningful, nondiscriminatory opportunity to compete. The litigation is not over and the incumbents do not yet appear prepared to cooperate. No evidence exists that wide spread local competition will develop in the foreseeable future. Consequently, market forces alone cannot be relied upon to lower access charges to forward-looking economic cost.

D. Widespread Facilities Based Competition Is Restrained by CLEC Financial Limitations, Resource Constraints, and Anti-Competitive ILEC Practices

More than 40 percent of MCI WorldCom's long distance revenues are used to pay for access to local customers through the ILECs. Therefore, MCI WorldCom devotes considerable resources to seeking access alternatives through facilities-based alternatives, either those of CAPs, or our own. Unfortunately, other than through the costly alternatives of building our own facilities, or collocating at an ILEC central office and purchasing unbundled network elements, there are simply no alternatives to ILEC switched access charges, such as Carrier Common Line (CCL), Presubscribed Interexchange Carrier Charge (PICC), Local Switching, Residual Transport Interconnection Charge (TIC), and the End Office Port Charge. Indeed, in the decade since the Commission introduced competition for transport services, transport competition is only beginning to develop for certain routes.

In the transport arena, the basic services provided by ILECs, include, entrance facilities to IXC points-of-presence (“POPs”), multiplexing, interoffice transport and “tail” transport to customer locations. The level of competition differs sharply between these services. As can be seen in the attached affidavit from Mr. Wayne Rehberger (see Appendix B), MCI WorldCom has been marginally successful in finding and implementing alternatives for DS3 Entrance Facilities in the limited locations served by CAPs. However, we have been far less successful in finding alternatives for interoffice transport and tail circuits, and we continue to use ILEC multiplexing almost 100 percent of the time.

Many of the switched transport and special access circuits MCI WorldCom has moved to CAPs are actually new or “growth” circuits, because of the many impediments the ILECs place on interexchange carriers (IXCs) seeking to “roll” existing traffic to competitors. Since every circuit lost to competitors is a loss of revenue, the ILECs have considerable incentive to implement policies and pricing that will restrict movement to competitors and lock in customers. And they have been quite successful.

For example, most ILECs delay the ordering process for rolling over circuits to competitors for as long as possible due to their reliance on a basic circuit management system called Trunks Integrated Record Keeping System (“TIRKS”). In the process of engineering and planning DS3-level circuit rolls, this system must be updated manually for all subtending DS1 and DS0 circuits, even when single DS3 reconfigurations are planned. Thus, moving a single circuit can require up to 672 manual system updates. This process is time consuming and resource intensive and serves to limit the volume of DS3 rollovers in a given year. In addition, ILECs assess rollover non-recurring charges for each of these circuits, even though they are not

being re-engineered or moved on their own. The rollover non-recurring costs are often extremely high, and often result in rollovers for existing circuits being cost prohibitive (See, Table 3 in Mr. Rehberger's affidavit).

The ILECs also use their pricing of DS1 and DS3 circuits as anti-competitive weapons. For customers to avoid paying excessive non-cost-based switched transport and special access rates they must sign up for long-term contracts, which effectively lock these circuits in place, out of the reach of competitors. Once a long-term contract is signed, ILEC access customers are dissuaded from migrating circuits to a competitor before the contract ends because of grossly excessive termination liabilities. As Mr. Rehberger's affidavit illustrates, MCI WorldCom has had no choice but to agree to long-term contracts for most of our circuits in order to receive the best rates available. However, the result for competition of placing circuits on term commitments is to limit the market that is potentially available for entrants that are contemplating investment decisions. High termination liabilities effectively ensure that even when competitors are available in a metropolitan area, the actual market they can compete in is primarily "growth" or new circuits, since customers cannot afford to terminate existing long-term contracts before they are completed.

High non-recurring charges also limit competitive multiplexing opportunities. A conversion to an alternative supplier of multiplexing would involve actual circuit migrations at the DS1 and DS0 levels. This enables the ILEC to assess non-recurring charges that are approximately three times that of the non-recurring charges assessed with DS3 rollovers.

Interoffice transport within the ILEC network, and the "tail" circuits to customers constitute the single largest cost element of the aggregated costs paid to the ILEC for transport

service. However, finding competitive alternatives for these functions of the ILEC network are expensive and time consuming. To compete for interoffice transport, MCI WorldCom or other CLECs/CAPs must establish collocations at ILEC central offices, a process that takes months to complete, and is extremely costly (See, Mr Rehberger's affidavit for a review of these collocation costs). It is even more difficult to find alternatives for tail circuits, as that entails costly buildouts to actual customer locations.

MCI WorldCom does have the opportunity to avoid the ILEC access networks completely by building our own local facilities, and we are doing so as quickly as possible. However, as Mr. Rehberger's affidavit points out, the costs involved in building facilities are staggering. MCI WorldCom has estimated that the costs of serving only 18 percent of the nationwide business market on its own facilities would cost \$21 billion. With costs like these, it is clear that for facilities-based competition to develop for most business customers and virtually all residential customers, CLECs will have to rely primarily on unbundled network elements. However, as discussed in *infra*, this is a proposition that has become increasingly unlikely due to the non-cost-based charges for many UNEs and the never-ending ILEC policies of delay and litigation.

III. Access Charges Must Be Reduced to Forward-Looking Economic Cost

A. The Commission Has Acknowledged The Economic Benefits And Legal Justifications For Reducing Access Charges To Economic Cost

As the declaration of Daniel Kelley explains, cost-based access charges would afford enormous benefits to consumers.³³ Allocative efficiency, productive efficiency, and dynamic efficiency would all be enhanced.

Allocative inefficiency results from the misdirection of scarce resources that occurs when prices do not reflect true economic costs. Since access charges are above cost, consumer long distance prices are also too high. As a result consumers make fewer and shorter calls than they would if costs and prices were properly aligned, and instead make countless other suboptimal consumption decisions. This misdirection of scarce resources inevitably reduces social welfare.

Productive efficiency measures the degree to which goods and services are provided in a cost-minimizing way. Reducing access charges to their economic cost would enhance productive efficiency in at least three ways: ILECs will have an increased incentive to become more efficient; uneconomic incentives to purchase dedicated access circuits would be reduced; and artificial incentives to develop alternative service delivery mechanisms, such as Internet telephony, would be reduced.

Dynamic efficiency measures the ability to innovate and adopt technological changes. The imposition of excessive access charges has undoubtedly deterred the development and use of productivity-enhancing innovations by telephone users. One cannot know what these

³³ See "Absence of Competition in the Exchange Access Market," Declaration of A. Daniel Kelley, Appendix B, May 7, 1998.

innovations might be, but the potential improvements in social welfare from reduced access charges could be quite large.

As of July 1, 1999 there can be no justification, legal or otherwise, for access charges to remain above their long-run incremental costs.³⁴ In the Access Charge Reform Order, and again in its Brief before the United States Court Of Appeals For The Eighth Circuit ("Eighth Circuit")³⁵, the Commission explained why the current access regime cannot continue:

(t)he possible allocation of costs to the interstate jurisdiction, may, for some consumers, increase long-distance rates substantially, suppressing their demand for interstate interexchange services. Implicit subsidies also have a disruptive effect on competition, impeding the efficient development of competition in both the local and long-distance markets. For example, where rates are significantly above cost, consumers may choose to bypass the incumbent LEC's switched access network, even if the LEC is the most efficient provider. Conversely, where rates are subsidized (as in the case of consumers in high-cost areas), rates will be set too low and an otherwise inefficient would have no incentive to enter the market. In either case, the total cost of telecommunications services will not be as low as it would otherwise be in a competitive market. Because of the growing importance of the telecommunications industry as a whole, this inefficient system of access retards job creation and economic growth in the nation.³⁶

Moreover, the Commission recognized the legal justification for removing the subsidies from access charges:

(t)he 1996 Act's call for specific "specific predictable and sufficient" universal

³⁴ Moreover, regardless of the Commission's target date to further reduce access charges, there can be no dispute that access rates must be at economic cost levels before RBOC entry into the in-region long-distance market.

³⁵ In The United States Court of Appeals For The Eighth Circuit, On Petitions For Review Of An Order Of The Federal Communications Commission, Nos. 9-2618 (and consolidated cases), Southwestern Bell Telephone Company, et al., Petitioners, v. Federal Communications Commission, et al., Respondents, Brief For Federal Communications Commission, filed December 16, 1997 ("FCC Eighth Circuit Brief").

³⁶ Access Charge Reform Order at para. 30 (footnote omitted).

service subsidies removes the need for supporting universal service subsidies historically built into the access charge system.³⁷

Thus, the Commission has concluded that to “fulfill Congress’s pro-competitive mandate, access charges should ultimately reflect rates that exist in a competitive market.”³⁸ However, at the time the Access Charge Reform Order was released, the Commission believed that the availability of unbundled network elements would “make it difficult for ILECs to maintain access charges above economic cost.” and thereby chose to let market forces work to reduce access charges.³⁹ Even while acknowledging that market forces could take years to reduce access charges to cost, the Commission refused to prescribe cost-based access charges for several reasons: 1) the lack of reliable forward-looking cost models to measure the joint and common costs in access charges;⁴⁰ 2) the disruptive effect lower access charges could have upon incumbent LEC business operations;⁴¹ and, 3) the effect immediate cost-based access charges would have upon universal service.⁴² As explained below, these reasons for not reducing access charges to cost are not valid in the current telecommunications environment. Therefore, the Commission should by regulation correct what the market has been unable to correct, by prescribing cost-based access rates in lieu of today’s above-cost rates. To accomplish this, the Commission should

³⁷ FCC Eighth Circuit Brief, p. 30, (quoting the Access Charge Reform Order at paras, 33-34.

³⁸ Access Charge Reform Order, at para. 42.

³⁹ Id., at paras. 32, 44.

⁴⁰ Id., at para. 45.

⁴¹ Id., at para. 46

⁴² Eighth Circuit Brief, at p. 21.

immediately open a supplementary proceeding to establish forward-looking cost levels for access, by inviting parties to submit forward-looking economic cost models for Commission review.

B. A Commission Failure To Immediately Reduce Access Charges to Cost Based On The Current Market Condition Would be Arbitrary And Capricious

As MCI WorldCom demonstrates above, the market-based approach to reduce access charges has failed. While we will not repeat ourselves here, it is important to note that even while the Eighth Circuit Court found that the Commission's use of a market-based approach was not "arbitrary, capricious, or in derogation of the public interest," the Court concluded that, if, "in light of actual market developments, the Commission determines competition is not having the anticipated effect on access charges, the agency presumably will revisit this issue."⁴³ Therefore, if despite the evidence that the market-based approach has failed and its admission that cost-based access charges benefit the national economy, the Commission still refuses to prescribe access charges to cost, it will be acting in an arbitrary and capricious manner and will be failing to act in the public interest.

C. The Lack of a Cost Model, And Concerns About Universal Service and Incumbent LEC Business Operations Are Not Valid Reasons to Continue Inflated Above-Cost Access Charges

There are no longer any valid reasons for continuing the subsidies in access charges. The

⁴³ In The United States Court of Appeals For The Eighth Circuit, On Petitions For Review Of An Order Of The Federal Communications Commission, Nos. 9-2618 (and consolidated cases), Southwestern Bell Telephone Company, et al., Petitioners, v. Federal Communications Commission, et al., Respondents, Opinion of the Eighth Circuit Court, filed August 19, 1998, at p. 50.

Commission's concern about universal service and the lack of an existing cost model will become moot on July 1, 1999, when it is expected to implement the new high cost fund for price cap LECs and makes explicit all universal service contributions. The Hybrid Cost Proxy Model ("HCPM"), adopted by the Commission just last week, sizes the subsidy which can be removed from the access revenue requirements.

In addition, the Commission's concern that a decrease in access revenues would "disrupt" ILEC business operations is not supported by the facts. Nor could it. As MCI WorldCom demonstrated in the report entitled "Absence of Competition in the Exchange Access Market," and in Appendix A, the ILECs are earning record profits. While a reduction in access charges to reflect their economic cost might diminish these monopoly profits, there has been no showing that it would have any impact on ILEC service quality or output. Furthermore, there is no evidence that preserving ILEC revenue is a more important goal for the nation than the economic benefits the Commission admits would accrue from cost-based access charges. As the ILECs have often stated, the Commission should not be in the business of protecting competitors, but instead should be promoting competition. The best method the Commission has to promote competition at all levels of the industry including exchange and exchange access, is to reduce access charges to economic cost.

MCI WorldCom urges the Commission to immediately open a supplementary pleading cycle to collect econometric models of forward-looking access cost. ILEC cost studies, e.g., studies that evaluate an ILEC's specific costs, are unnecessary for the purpose of determining forward-looking access pricing. Just as universal service subsidies can be sized based on a model of the network, so too can forward-looking access cost models size access costs. The

Commission should begin this analysis now.

IV. MCI WorldCom Recommended Action for Access Reform

A. Productivity Discussion

1. The Commission's Total Factor Productivity Study Should Be Based on Interstate, Not Total Company, Results

In the Price Cap Review Order, the Commission determined that it would select the productivity, or X, factor, based on total factor productivity (TFP).⁴⁴ This methodology computes productivity based on the difference between the growth rate of outputs and the growth rate of inputs. Thus, if a firm's outputs grow at 8.5 percent per year, while its inputs grow at only 2 percent per year, its TFP would be 6.5 percent. The Commission also determined that the TFP would be computed based on total company operations, rather than only the interstate operations of the company. The Commission chose to use total company, rather than interstate-only results because, it claimed, the record did not demonstrate any systematic bias in using total company results.⁴⁵

The Commission erred in concluding that there was no systematic bias in using total company results. The Commission itself stated that interstate and intrastate services are usually provided over common facilities. Since that is the case, it is reasonable to conclude that the growth of inputs is the same for the two jurisdictions. Thus, if interstate outputs are growing faster than intrastate outputs, interstate TFP should be higher than total company TFP.

⁴⁴ Price Cap Review Order at para. 19.

⁴⁵ Price Cap Review Order at para. 110.

In its TFP study previously submitted in this docket, AT&T demonstrated, and no one has disputed, that interstate outputs have indeed grown faster than intrastate outputs. AT&T also presented the argument that assuming that interstate inputs grow at the same rate as total company outputs is a conservative assumption. This is the case because the interstate services use primarily network equipment, such as transmission and switching equipment, that are experiencing great economies of scale. By contrast, subscriber loops, which are used more heavily by local services, have a higher labor cost component, and reflect fewer economies of scale, as the growth in their use that occurs comes primarily from extending service to new neighborhoods. Given this, it is reasonable to conclude that interstate only TFP is higher than total company TFP. The Commission failed to address these arguments in its Price Cap Review Order, and must do so now.

The Commission selected the X factor of 6.5 percent based on an analysis of total company results for 1985 through 1995. MCI WorldCom is currently reviewing whether the productivity studies on which the Commission relied in setting this X factor require updating. However, the short pleading cycle set by the Commission did not allow time for us to complete our review. We expect to introduce further evidence on the ILECs' productivity at the earliest possible opportunity.

Nevertheless, AT&T has filed an analysis of interstate-only TFP using the Commission's methodology, and found that the interstate-only TFP exceeds the total company TFP for that time period by 2.7 to 3.5 percentage points.⁴⁶ The Commission should therefore raise the X factor to

⁴⁶ See Ex Parte letter from AT&T to Magalie Roman Salas, dated August 11, 1998. The analysis in that ex parte examined productivity over a number of time periods, yielding a difference between interstate and total company productivity that varied depending on the

at least 9.2 percent - the 6.5 percent it adopted based on total company results plus the 2.7 percent difference between interstate and total company productivity - to reflect this higher interstate productivity, reducing rates by about \$650 million.

2. The ILECs' Continuing Increase in Earnings under the Commission's TFP-based X-Factor Is Proof That Total Company TFP Is a Biased Estimator

When the Commission adopted the 6.5 percent TFP-based X factor, it stated that it believed that measured ILEC TFP might understate achievable TFP, for several reasons. First, ILEC historical TFP was based on the ILECs' behavior under a price cap regime that had a sharing component. That this sharing component limited the ILECs' ability to retain for itself all the cost savings it achieved, the FCC argued, reduced the ILECs' incentive to lower its costs and thereby increase its measured productivity. In addition, the FCC stated that the changes in access rate structures it adopted in its Access Reform proceeding would stimulate usage and allow the ILECs to achieve greater economies of scale.⁴⁷

The Commission's analysis used to set the 6.5 percent X factor examined the years 1985 through 1995. During that period, the ILECs faced rate of return regulation in 1985 through 1990 and thereafter were under price cap regulation, with X factors that ranged from a low of 3.3 percent (from 1991 through 1994) to a high of 5.3 percent (in 1995, if the ILEC selected the no-sharing option). During the rate of return years, ILEC rates were targeted each year to earn the authorized rate of return, and in general they earned fairly close to that level. In the first price cap years, from 1991 through 1994, however, the ILECs' earnings rose by approximately 0.6

time period examined.

⁴⁷ Price Cap Review Order at para. 142.

percentage points per year. Since the Commission revised its price cap plan in 1995, raising the X to 5.3 percent in 1995, and raising it again to 6.5 percent in 1997, the ILECs' earnings have continued to rise - by approximately 0.6 percentage points per year.

As much as they indicate that the Commission's price cap plan is insufficiently constraining the ILECs' pricing, these increased earnings may be understated. They reflect the ILECs' substantial increases in the depreciation and marketing expenses assigned to the interstate jurisdiction.⁴⁸ Depreciation expense has risen over 28 percent in the price cap years of 1991 through 1997. This is faster than the growth in Telephone Plant in Service, which has grown at 25.6 percent over the same time period. The Commission has substantially liberalized the ILECs' ability to revise their depreciation expenses upward, and ILECs have apparently taken advantage of that opportunity.

Marketing expense has also grown over the same time period, by 58.8 percent. These expenses are incurred for product management, sales, and advertising activities. Even though these activities have nothing to do with the provision of interstate access services, the Commission's Part 36 and Part 69 rules assign a portion of these costs to Interstate Access. Thus, the increases the ILECs have booked in Marketing and Depreciation expenses serve to further obscure the fact that the Commission's price cap plan, by using too low an X factor, has allowed the ILECs to profit significantly at the expense of ratepayers.

Clearly, the Commission's belief that the ILECs would be able to achieve greater

⁴⁸ The results discussed in this section are the same whether one looks at Interstate expenses or Total Access expenses. All growth rates are derived from data reported by the ILECs in ARMIS 43-01, rows 1110 through 1190, columns h and t.

productivity if they faced a pure price cap incentive have been borne out.⁴⁹ The question, however, is whether the ILECs' customers or its shareholders should receive the benefit of that greater productivity. In a truly competitive market, customers receive those productivity gains.⁵⁰ Under the Commission's current price cap plan, those benefits are falling mainly to the shareholders.

3. ILEC Shareholders Have Received the Majority of the Benefits of Price Caps

The benefits of price cap regulation to the ILECs are straightforward - it is the earnings above their true cost of capital that they are allowed to keep as they lower their costs of providing service. However, to quantify the benefits to the ILECs, it is important to determine what the true cost of capital is. Price cap regulation was initiated at rates set incorporating a cost of capital of 11.25 percent. MCI WorldCom has previously demonstrated in this docket that the ILECs' cost of capital has been no more than 10 percent.⁵¹ As discussed infra, based on the most current data, the ILECs' true cost of capital is now only 9.1 percent. Thus, the ILECs' earnings of 15.64 percent in 1997 represent a substantial benefit to the ILECs - almost \$2.1 billion in 1997 alone.

⁴⁹ The Commission's belief that the rate restructure under its access reform decision would also stimulate demand and thereby increase productivity cannot yet be confirmed. The rate restructure was in effect starting in 1998, and ILEC earnings results are available only through 1997.

⁵⁰ In a perfectly competitive market, any above-average returns a firm is able to achieve in the short run, either because it has superior technology, access to resources, or skill in combining the two, is competed away in the long run as other firms are able to copy those advantages. No industry would be able to sustain continuing increases in returns, as the ILECs have, without new entrants coming in and competing away the excess returns.

⁵¹ See Appendix A of MCI Comments filed May 9, 1994, in CC Docket No. 94-1, which found an ILEC cost of capital of 10.0 percent, and Attachment A of MCI Comments filed March 11, 1996 in AAD 96-28 and AAD 95-172, which found an ILEC cost of capital at that time of just under 9.5 percent.

For consumers, the benefits can also be fairly easily measured; they are the Consumer Productivity Dividend (CPD), which is the increase in the productivity factor above the level historically achieved by the ILEC, plus the benefits of below cap pricing. However, computing the benefits to the consumer in this way assumes that the X factor, excluding the CPD, was set equal to the level that the ILEC would have achieved without price cap regulation.⁵²

For purposes of the analysis presented here, MCI WorldCom conservatively assumes that the X-factor was set correctly in each year, and that the ILECs' cost of capital was 10 percent in each of the years from 1991 to 1997. Even making this conservative assumption, the ILEC

TABLE 1
Cumulative Benefits of LEC Price Caps to Ratepayers and LEC Shareholders

	1991	1992	1993	1994	1995	1996	1997
Total Revenue	19,102,244	20,088,670	20,678,859	21,579,818	22,170,446	23,610,118	24,044,499
Total Expenses	15,444,009	16,193,555	16,591,116	17,342,577	17,818,078	18,648,120	18,939,170
Net Return	3,658,235	3,895,115	4,087,743	4,232,013	4,462,362	4,984,994	5,115,603
Avg Net Investment	30,917,971	31,560,986	31,230,966	30,790,620	32,126,293	33,274,870	32,700,321
Rate of Return	11.83%	12.34%	13.09%	13.74%	13.89%	14.98%	15.64%
Cumulative Benefits To Shareholders @ cost of capital = 10.00%	566,438	1,305,454	2,270,101	3,423,052	4,672,784	6,330,291	8,175,862
To Ratepayers							
Consumer Productivity Dividend	47,756	198,170	455,623	830,848	1,325,269	1,967,213	2,737,921
Below Cap Pricing*	35,209	178,738	572,683	1,143,173	1,569,586	2,077,739	2,286,324
Total	82,965	376,908	1,028,306	1,974,021	2,894,855	4,044,952	5,024,246

Source: * For 1991 to 1994, USTA Ex Parte filed March 14, 1995 in CC Docket No. 94-1
For 1995 through 1997, estimated by based on data from the Tariff Review Plan in each year's Annual Access Filing.

shareholders have received greater benefits than the ILECs' customers. As shown in Table 1, the ILECs have received a cumulative benefit of almost \$8.2 billion, while customers have received

⁵² It also conservatively assumes that the ILEC would not have priced below the maximum price allowed by the rate of return rules.

only \$5.0 billion. Clearly, even if the goal of price caps is merely to provide roughly equal benefits to shareholders and ratepayers, the current price cap plan is greatly skewed in favor of shareholders. If the goal of price caps should be, as MCI WorldCom believes, to mimic a competitive market, which would in the long run return all cost savings to consumers, the price cap plan has hardly been a success.

It is not necessary to allow ILECs to retain excessive earnings - earnings above their true cost of capital - to give them the incentive to control their costs. If the X factor were set at a level that would allow the ILECs to achieve their cost of capital it would ensure that ratepayers receive the full benefits they would receive under a competitive market while also ensuring that the ILECs would receive the earnings they would receive in that competitive market. Any earnings above that level are simply a measure of the monopoly power the ILECs retain.⁵³

4. Increasing ILEC Earnings under Price Caps Are Even More Unreasonable in Light of Their Declining True Cost of Capital

A properly calibrated price cap plan should mimic a competitive market - individual companies may, in the short run, achieve supra-normal earnings, but overall the industry should earn a normal rate of return, and the individual company should be able to sustain high earnings only if it continues to find ways to be more productive than the other firms in the industry.

However, the industry as a whole cannot earn supra-normal profits in the long run.

The Commission's price cap plan does not achieve this goal. While individual company

⁵³ The ILEC earnings presented in this section reflect the earnings reported on the Form 492A by the price cap ILECs. In a sense, these earnings understate the ILECs' true earnings, because they do not reflect the fact that the ILECs' earnings above their true cost of capital are a cost-free source of funds to them, and thus should be recorded as a reduction in rate base.

results vary, overall price cap ILEC earnings have risen from their 11.25 percent target at the start of price caps to over 15.6 percent in 1997. Based on the statements about earnings in the third quarter of 1998 recently released by the ILECs, these strong earnings have continued, despite the Commission's increased X factor implemented in the middle of 1997.⁵⁴

If these continually increasing earnings are not enough of an indication that the Commission's 6.5 percent X factor is not sufficient to reflect the ILECs' true productivity, they are even more incredible when viewed in the light of the decline in the ILECs' cost of capital since price caps began. There are several studies submitted to the Commission that show that the ILECs' cost of capital has been no more than 10 percent for some time now. In Appendix C, MCI WorldCom submits a study of the current ILEC cost of capital, which shows that the ILECs' cost of capital has declined even further.

As in the cost of capital studies previously submitted, an analysis was performed using the Discounted Cash Flow (DCF) methodology the Commission used when it arrived at the current 11.25 percent cost of capital. The study shows that the downward trend in the ILECs' cost of capital has continued, with their cost of capital now standing at 9.1 percent. This has resulted from a decline in their cost of equity to 11.4 percent, in their cost of debt to 7.1 percent, and in the percentage of equity to 46.8 percent.

To further corroborate the reasonableness of the cost of equity computation, a cost of capital study is performed which uses the Capital Asset Pricing Model (CAPM) to estimate the cost of equity. The CAPM analysis assumes that the cost of equity for a firm is the return on a

⁵⁴ See, e.g., Bell Atlantic and U S West Top Expectations on Data Growth, Communications Daily, Thursday, October 22, 1998, page 4, and SBC, Ameritech and SNET Profits Rise in Quarter, Communications Daily, Friday, October 16, 1998, page 8.

"risk free asset" plus an equity premium reflecting the investment risk for that firm. Using a range of measures for the risk free return and the equity premium, the CAPM analysis finds that the cost of equity for the Regional Bell Operating Companies falls in the range of 10.2 to 11.6 percent. These results are consistent with the 11.4 percent cost of equity found in the DCF study. Taken together, these two studies confirm that the ILECs' cost of capital has fallen significantly since price cap regulation began, to 9.1 percent.

With the Commission's price cap plan allowing ILECs to earn 15.6 percent, and maybe more in 1998, while the ILECs' true cost of capital has fallen to such a low level, the Commission must adjust its productivity factor upward. Whether this is due to additional years' data being analyzed, the use of interstate-only data, as discussed supra, an increase in the CPD, or to a combination of these factors, the Commission must increase the X factor to ensure that ratepayers receive the proper rate cuts.

5. The Commission must Make a One-time Adjustment to the Price Caps to Reflect its Revised X Factor

When the Commission adopted its 6.5 percent X factor in 1997, it required the ILECs to make a one-time adjustment to make that selection effective back to 1996. The Commission had initially begun its review of the use of the TFP methodology in 1995, and announced at that time that it intended to complete the review within a year. Since the review took two years, the Commission required the ILECs to recompute their price caps as if the revised X factor had been completed on schedule.

The Commission put the ILECs on notice in 1995 that it wished to move to a TFP-based X factor. Thus, the Commission should, at a minimum, have required the ILECs to adjust their

price caps to reflect the TFP-based X factor beginning in 1995. Making this adjustment to reflect the Commission's 6.5 percent X factor would result in an additional rate cut of approximately \$290 million.

In addition, if the Commission adopts an interstate-only TFP factor, as MCI WorldCom advocates here, it should adjust the price caps to reflect this. Thus, if the Commission raises the X factor to 9.2 percent, it should make a one-time adjustment to reflect this selection back to 1995, resulting in an additional \$2.6 billion rate cut.

V. Additional ILEC Pricing Flexibility at this Time Is Unwarranted and Would Have Anticompetitive Effects

There is no evidence that further pricing flexibility would have the effect of intensifying access competition and driving access to cost. In fact, it is more likely that the additional pricing flexibility proposed by the ILECs would enable them to preempt the development of access competition. Premature pricing flexibility would permit the incumbent LEC to reduce access charges selectively in order to deter new entrants, while continuing to charge above-cost access charges in areas and for services where there are no competitive forces. By slowing the development of competition, the additional pricing flexibility requested by the ILECs would only exacerbate the flaws inherent in the market-based approach.

Given these dangers, the Commission should not grant additional pricing flexibility unless there has been a clear demonstration that existing pricing flexibility is inadequate to respond to actual competition. As MCI WorldCom and many other parties have pointed out previously, the ILECs have generally failed to utilize their existing pricing flexibility. Even in

the market for switched transport services, where there is, at most, only nascent competition in some markets, the incumbent monopoly LECs have made little or no use of price cap rules that permit geographic deaveraging of transport rates and term and volume discounts.⁵⁵

First, as the table below demonstrates, all the RBOCs, with the exception of Nevada Bell which is slightly below "cap," continue to price Common Line and Traffic Sensitive access services as high as permissible under the Commission's price cap rules. Even for interstate transport services, the services for which CLEC competition has been developing for nearly ten years, all the RBOCs are either at, or near, cap.

⁵⁵ In response to emerging competition, the Commission offered price cap LECs targeted and measured pricing flexibility which would increase in response to actual competitive conditions. In the expanded interconnection proceeding, price cap LECs were afforded the flexibility to price their switched trunking facilities differently in up to three zones, within existing service categories and subcategories. Expanded Interconnection with Local Telephone Facilities, Transport Phase, Second Report and Order and Third Notice of Proposed Rulemaking, CC Docket No. 91-141, 8 FCC Rcd 7374 (1993) (Switched Transport Expanded Interconnection Order). The zone subcategories have upper pricing bands of 5 percent and lower bands of 10 percent. In its Third Report and Order, released December 23, 1996, the Commission eliminated the price cap lower service band indices, and substantially eased the requirements necessary for the introduction of ILEC new services. Access Charge Reform, CC Docket No. 96-262 et al, Third Report and Order, 11 FCC Rcd 21354, released December 24, 1996. ILECs have also been afforded the additional flexibility to offer volume and term discounts on switched transport. Virtual Collocation Order, Expanded Interconnection with Local Telephone Company Facilities, CC Docket No. 91-141, Memorandum Opinion and Order, 9 FCC Rcd 5154 (1994) ("Virtual Collocation Order").

RBOC Pricing of Interstate Access Services ⁵⁶

RBOC	Trunking Basket	Traffic Sensitive Basket	Common Line Basket
Ameritech	1.16% Below Cap	At Cap	At Cap
Bell Atlantic	At Cap	At Cap	At Cap
BellSouth	At Cap	At Cap	At Cap
SBC	At Cap	At Cap	At Cap
Pacific Telesis	At Cap	At Cap	At Cap
Nevada Bell	5.5% Below Cap	3.3% Below Cap	At Cap
US West	1.28% Below Cap	At Cap	At Cap

The Commission's clear expectation was that, under the market-based approach, competitive entry would drive ILEC prices below the cap and toward cost.⁵⁷ However, with very few exceptions, the price cap ILECs continue to price at the maximum allowed by the price cap index in every basket. The reductions in access charges that have occurred since the adoption of the Access Charge Reform Order have been due entirely to the order's limited prescriptive measures, not to any market-based pricing discipline.

Moreover, as the tables below and in Appendix D demonstrate, none of the RBOCs are fully utilizing their ability to deaverage access rates, or offer switched facility volume and term discounts to their access customers.

⁵⁶ Source: Ameritech Transmittal No. 1173, September 16, 1998; Bell Atlantic Transmittal No. 1059, June 29, 1998; BellSouth Transmittal No. 467, June 29, 1998; Nevada Bell Transmittal No. 248, July 24, 1998; Pacific Bell Transmittal No. 1997, July 28, 1998; SBC Transmittal No. 2719, August 13, 1998; USWest Transmittal No. 928, June 29, 1998.

⁵⁷ The Commission has found that interstate access rates are well above cost. Access rate declines reflecting only the rate of ILEC productivity change would not move access charges any closer to forward-looking economic cost.

A. Ameritech

1. Zone Structure

Ameritech has implemented Zone Structure for most DS1 and DS3 rate elements, but are only fully utilizing the flexibility for Channel Terms (see Appendix D). The fixed portion of Transport is the same for Zones 1 & 2, with Zone 3 being at a higher rate. Per-Mile Transport, and Mux have Zone structure in place, but there are no differences among the rates. Ameritech has broken rates out by state for several elements, but only for DS1 Fixed Transport is there any difference among the states.

2. Discount Plans

During recent filings with the FCC, Ameritech has raised almost all of the DS1 and DS3 Special access rates for services not under 60-month term plans.

B. Bell Atlantic-South

1. Zone Structure

Bell Atlantic has a zone structure in place for most rate elements, however, there are a number of cases where there is no difference in rates among zones. From the DS1 point of termination, the rates are the same for each zone. The same holds true of the tandem switched transport elements and the direct trunked transport elements. BellAtlantic - South also does not use its pricing flexibility for some of the mux elements, mainly the DS1 to voice grade and the DS3 to DS1 NRCs.

2. Discount Plans

Bell Atlantic offers a number of discount plans, none of which uses zone pricing

flexibility to the fullest extent (see Appendix D). The Direct Trunked Transport elements are available on two year, three year, five year, and seven year terms. In each case, the rates are the same for zones 1, 2, and 3.

C. Bell Atlantic - North (NYNEX)

1. Zone Structure

NYNEX also does not utilize its pricing flexibility fully. The nonrecurring charges for entrance facilities for DS1s are the same across all zones in the entire region. The same is true for the DS3s. Tandem Switched Transport elements are the same in all zones, as are Direct Trunked Transport elements.

D. BellSouth

1. Zone Structure

BellSouth has implemented zone pricing. However, it has not fully deployed the rate changes. Some elements have zone pricing rates if service is purchased from the term plans, but not if it is purchased as month-to-month billing.

<u>Element</u>	<u>Zone</u>	<u>Month- to-Month</u>	<u>24-48 Months</u>	<u>49-72 Months</u>
Sw. DS1 EF	1	\$150	\$127	\$124
	2	\$156	\$127	\$124
	3	\$161	\$127	\$124
Sw. DS3 EF	1	\$2100	\$1890	\$1680
	2	\$2100	\$1995	\$1890
	3	\$2100	\$2100	\$2100

Sp. DS1 Ch. Term	1	\$150	\$127	\$124
	2	\$156	\$127	\$124
	3	\$161	\$127	\$124
Sp. DS1 Fixed Mi.	1	\$90	\$80	\$75
	2	\$94	\$80	\$75
	3	\$97	\$80	\$75
Sp. DS1 Per Mi.	1	\$23	\$15	\$13
	2	\$24	\$16	\$14
	3	\$25	\$17	\$15

E. Pacific Bell

1. Zone Structure

Pacific Bell has zone structure in only one (CA) of their two states (see Appendix D).

2. Discount Plans

Pacific Bell does not offer payment plans for Voice Grade/DDS, Direct Trunked Transport, or cross-connects. Pacific Bell offers two DS1 pricing plans, however the associated terms (e.g., high maximum term liabilities and minimal discounts) do not generally warrant an IXC's, such as MCI WorldCom's, commitment.⁵⁸

Pacific Bell DS1 High Capacity Service Optional Payment Plan (Discounts Offered to Customers)

	<u>3 Year</u>	<u>4 Year</u>	<u>5 Year</u>
Zone 1	2.0%	3.0%	4.0%
Zone 2	1.0%	1.5%	2.0%
Zone 3	0.5%	0.75%	1.0%

⁵⁸ The DS1 Rate Stability Plan/Fiber Advantage requires commitment on an individual circuit basis (which is an administrative nightmare for large IXCs such as MCI WorldCom), offers minimal discounts, and imposes significant termination liabilities for early termination.

For DS3w, Pacific Bell offers Rate Stability Plans/Fiber Advantage, however, only for Channel Termination charges. There are no Rate Stability Plans for DS3 MUX or Mileage charges. Pacific Bell raised their Special Access DS1 and DS3 (per mileage for all zones except DS3 Zone 1) rates in recent annual access filings. Pacific Bell continues to raise other rates for which there is no competition, such as their LIDB Query rate.

F. SBC

1. Zone Structure

For switched transport, SWBT has zone structure in all states but Kansas. However, the rate differentials are minimal. For special access, SWBT has zone structure in all five states. However, as with switched access, there are minimal rate differentials between zones (see Appendix D).

2. Discount Plans

SWBT does not offer any term pricing plans for flat rated switched facilities, including entrance facilities and Direct Trunked Transport. Compared to other ILECs, SWBT's Megalink DS3 rates continue to be relatively high.

G. US West

1. Zone Structure

USW has zone structure in 8 of their 14 states, but it does not price differently between zones (see Appendix D). The majority of their end offices are in Zone three.

2. Discount Plans

USW offers only a Rate Stability Plan, which keeps rates for Voice Grade, Entrance Facilities, and Direct Trunked Transport services from increasing (without offering discounts). Since January 1, 1998, access customers could no longer purchase DS3s in packages or groups. In its 1998 annual access filing, USWest once again increased DS1 and DS3 rates significantly.

The Commission has already set conditions, which when met, and when combined with the pricing flexibility already provided in price caps, allow the ILECs substantial pricing flexibility. The ILECs have not yet taken advantage of the pricing flexibility that the Commission already permits, presumably because they currently face no significant competitive threat for access services. Therefore, no valid reason exists for the Commission to grant, or even contemplate offering ILECs more pricing flexibility. Until ILECs demonstrate that they do not maintain monopoly control over essential bottleneck facilities, that they are significantly restrained or harmed by a lack of pricing flexibility, and that effective competition exists for access services, the Commission should not even contemplate extending increased pricing flexibility to the ILECs.

VI. MCI WorldCom Recommended ILEC Pricing Flexibility Proposal

In the Public Notice, the Commission asks parties to update the record on pricing flexibility issues and to comment on pricing flexibility proposals made by Bell Atlantic and Ameritech since the release of the Access Reform Order.

As discussed in greater detail below, the Bell Atlantic and Ameritech proposals would grant the ILECs too much pricing flexibility too soon. These proposals are, in fact, even more generous to the ILECs than the already-generous proposal that the Commission outlined in the Access Reform Notice. For example, under Bell Atlantic and Ameritech's proposals, most large price cap ILECs would obtain contract pricing authority for transport services immediately, based on the slightest of competitive showings.

While MCI WorldCom urges the Commission to reject the Bell Atlantic and Ameritech proposals and to abandon the original Access Reform Notice proposal, MCI WorldCom nonetheless believes that the Commission should establish in this proceeding a framework that will guide its evaluation of ILEC pricing flexibility requests. This framework is needed not because the ILECs have any immediate need for additional pricing flexibility, but because the establishment of clear standards will prevent the Commission from being burdened repeatedly with premature requests for city-by-city and service-by-service pricing flexibility.⁵⁹

At this time, the Commission need only define a framework for transport services pricing flexibility. Defining a framework for switched access pricing flexibility would be premature, given that there is virtually no competition for switched access services, nor any reasonable prospect that significant competition will develop in the foreseeable future.

⁵⁹See, e.g., Petition of U S West Communications, Inc. for Forbearance, August 24, 1998, CC Docket No. 97-158, August 24, 1998. In their comments on U S West's recent petition for nondominant treatment in the Phoenix "high capacity market," several ILECs indicated that they planned to file similar petitions. See Comments of GTE, CC Docket No. 98-157, October 7, 1998, at 2.

MCI WorldCom proposes a two-phase framework for transport pricing flexibility. In the first phase, ILECs that are able to demonstrate “substantial competition” would be permitted to file contract tariffs that are generally available to similarly situated customers. In the second phase, ILECs that are able to demonstrate that they no longer possess market power would be declared nondominant, permitted to remove services from price cap regulation, and would be subject to nondominant carrier tariff rules.

A. The Commission’s Pricing Flexibility Framework Should Distinguish Between Transport and Switched Access Services

The Commission defines a relevant product market as a service or group of services for which there are no close demand substitutes.⁶⁰ To determine relevant product markets, the Commission must consider whether, if, in the absence of regulation all carriers raised the price of a particular service or group of services, customers would be able to switch to a substitute service offered at a lower price.

Applying this standard, the Commission has consistently defined the “local exchange and exchange access market” as a relevant product market.⁶¹ However, it may be appropriate, for

⁶⁰See, e.g., In the Matter of COMSAT Corporation, File No. 60-SAT-ISP-97, Order and Notice of Proposed Rulemaking, rel. April 28, 1998, at ¶25 (Comsat Order).

⁶¹In the Matter of Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc., Memorandum Opinion and Order, CC Docket No. 97-211, September 14, 1998, at ¶164 (WorldCom/MCI Order); Applications of Teleport Communications Group Inc. and AT&T For Consent to Transfer of Control of Corporations Holding Point-to-Point Microwave Licenses and Authorizations to Provide International Facilities-Based and Resold Communications Services, Memorandum Opinion and Order, CC Docket No. 98-24, Memorandum Opinion and Order, released July 23, 1998, at ¶20 (AT&T/TCG Order); Applications of NYNEX Corporation and

pricing flexibility purposes, to treat transport and switched access services separately, where “transport” services are defined as trunking basket services other than the TIC and switched access services are defined as traffic sensitive and common line basket services.

Transport and switched access services may constitute distinct product markets because dedicated access is not a realistic alternative for most switched access customers. Even if the provision of dedicated access were competitive, it would be profitable for a carrier that has a monopoly in the provision of switched access services to price these services above economic cost because not enough customers would change from switched to dedicated access to make the price increase unprofitable.

Even if transport and switched access services do not constitute separate product markets, Commission precedent would permit separate treatment of these services for pricing flexibility purposes. In the AT&T proceedings, the Commission defined a single domestic interexchange market, but distinguished between business and residential services in streamlining the price cap rules applied to AT&T.⁶² Furthermore, the Commission has, since the expanded interconnection rules were adopted several years ago, distinguished between transport services and switched access services in the degree of pricing flexibility permitted.

Distinguishing between transport and switched access services for pricing flexibility purposes would be appropriate for at least two reasons. First, competition for switched access

Bell Atlantic Corporation for Consent to Transfer Control of NYNEX Corporation and Its Subsidiaries, Memorandum Opinion and Order, File No. NSD-L-96-10, August 14, 1997 at ¶51 (Bell Atlantic/NYNEX Order).

⁶²In the Matter of Competition in the Interstate Interexchange Marketplace, Report and Order, 6 FCC Rcd 5880, 5881-5882 n.6 (1991) (Interexchange Order).

services is even less developed than for transport services. Second, the competitive dynamics for the two types of services differ significantly. The choice of supplier of switched access services is not made by the IXC, but is a byproduct of the selection of a local service provider by the end user. By contrast, the choice of supplier for transport services, including special access, is typically made by the IXC (if viable competitive alternatives are available).

While the Commission should evaluate pricing flexibility requests with reference to the transport or switched access service categories, the Commission should make clear that it may choose to maintain stiffer regulatory safeguards for particular services within these categories. This approach would be consistent with the precedent established by the Interexchange Order, in which the Commission permitted “maximum streamlining” for most of AT&T’s business services but found that streamlining of its regulation of AT&T’s analog private line services would not be in the public interest.⁶³

Similar safeguards may be required for ILEC services. Today, there is little or no competition for tandem switched transport services or for DDS, voice grade, and audio and video circuits. It is conceivable that the Commission, after evaluating an ILEC’s request for transport services pricing flexibility, may grant such flexibility but find that existing regulatory mechanisms remain necessary to protect customers of particular transport services such as tandem switched transport, DDS, voice grade, audio, or video circuits.

⁶³Interexchange Order, 6 FCC Rcd 5895-5896.

B. Pricing Flexibility for Transport Services

Below, MCI WorldCom outlines a simple framework that the Commission should use in evaluating ILEC requests for transport pricing flexibility.

1. Overview

The starting point for the Commission's transport services pricing flexibility framework should be the AT&T proceedings. In 1991, after finding that AT&T faced "substantial competition" for business services, the Commission permitted AT&T to file contract tariffs for business services, remove business services other than analog private line services from price cap regulation, and file tariffs on 14 days' notice without cost support.⁶⁴ AT&T's business services remained subject to the tariff filing requirement and other dominant carrier rules until the Commission determined in 1995 that AT&T no longer possessed market power in the domestic interexchange market.⁶⁵

Based on this precedent, MCI WorldCom proposes a simple two-phase framework for ILEC transport services. In the first phase, ILECs that are able to demonstrate "substantial competition" would be permitted to file contract tariffs that are generally available to similarly situated customers. In the second phase, ILECs that are able to demonstrate that they no longer possess market power in the "local exchange and exchange access" market would be declared nondominant, permitted to remove services from price cap regulation, and would be subject to nondominant carrier tariff rules. This two-phase framework is not only consistent with the

⁶⁴Id. at 5880.

⁶⁵In the Matter of Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, Order, 11 FCC Rcd 3271 (1995) (AT&T Reclassification Order).

AT&T precedent, but is also consistent with the approach proposed by the Commission in the 1995 Second Further Notice in CC Docket No. 94-1.⁶⁶

2. Geographic Areas for Applying the Substantial Competition Standard

The Commission should in this proceeding provide guidelines for defining the geographic areas for which the ILECs may request additional pricing flexibility under the framework outlined above. In their comments in this proceeding and in the pricing flexibility phase of CC Docket No. 94-1, the ILECs have suggested geographic areas as small as a wire center and as large as a LATA.⁶⁷

MCI WorldCom believes that the standard suggested in the 1995 Second Further Notice remains appropriate: “[t]he relevant geographic market must be narrow enough to only encompass competing access services for the same set of customers, yet be broad enough to be administratively workable.”⁶⁸ MCI WorldCom suggests that the Commission analyze pricing flexibility requests with respect to a metropolitan area, such as a Metropolitan Statistical Area (MSA) or contiguous wire centers covering an area roughly comparable to an MSA. This geographic area definition recognizes that transport competition is likely to develop first in metropolitan areas, and defines areas large enough to be administratively workable.

⁶⁶In the Matter of Price Cap Performance Review for Local Exchange Carriers, Second Further Notice of Proposed Rulemaking in CC Docket No. 94-1, 11 FCC Rcd 858, 861-862 (1995) (Second Further Notice).

⁶⁷Id. at 914.

⁶⁸Id. at 911.

3. Competitive Showing/Substantial Competition Standard

According to Commission precedent, application of the substantial competition standard requires that the Commission examine such factors as demand elasticity, supply elasticity, market share, and the incumbent's pricing behavior.⁶⁹ For several of these factors, the Commission should establish certain minimum requirements that ILECs would be required to demonstrate as part of a petition for contract pricing authority. These requirements would be designed to streamline the Commission's evaluation of ILEC petitions by establishing in advance certain necessary, but not sufficient, indicators of "substantial competition."

i. Demand Elasticity

In examining demand elasticity for transport services, the Commission cannot simply assume that demand elasticity is high because transport services are typically purchased by interexchange carriers, large businesses, and other sophisticated users. A finding of high demand elasticity requires not only that the ILEC's customers are willing to switch suppliers, but also that they have the ability to do so.⁷⁰

As discussed earlier in these comments, customers of ILEC transport services currently have only a limited ability to switch suppliers. First, alternative sources of supply are simply unavailable on every route. Second, customers of transport services often do not have the ability to switch suppliers because their high-capacity circuits are locked up in ILEC term plans.

⁶⁹Interexchange Order, 6 FCC Rcd at 5887-5893.

⁷⁰See, e.g., Comsat Order at ¶71 ("High firm demand elasticity indicates that customers are willing and have the ability to switch to another service provider in order to obtain price reductions or desired features.")

Substantial termination liabilities make switching suppliers uneconomic. Third, inflated nonrecurring charges and inefficient ILEC processes create substantial barriers to switching suppliers.

Before granting an ILEC contract pricing authority, the Commission must take affirmative steps to ensure that transport customers can actually switch suppliers. First, the Commission should require ILECs to waive nonrecurring charges associated with the rearrangement of transport facilities to a competitor; the ILEC should begin waiving these charges at least one year before filing a petition for contract pricing authority. Waiving these charges will substantially reduce artificial barriers to switching transport services suppliers.

Second, the Commission should permit “fresh look” for term plans. Fresh look is appropriate because IXCs’ decisions to enter into these term plans were based on predictions of the likely evolution of competition and ILEC pricing under pre-1996 Act and pre-access reform rules. To the extent that the passage of the Telecommunications Act of 1996 led to additional CLEC investment and created additional sources of supply on some routes, and to the extent that the rules adopted in this proceeding change the pricing structure for transport services, IXCs should have the opportunity to avail themselves of these new competitive alternatives.

ii. Supply Elasticity

One of the most important factors in the Commission’s assessment of petitions for contract pricing authority will be its evaluation of supply elasticity. Supply elasticity refers to the ability of suppliers in a given market to increase the quantity of service supplied in response to an increase in price. If existing competitors have or can easily acquire significant additional capacity, then supply elasticities tend to be high.

In the Interexchange Order, in considering the extent of supply elasticity sufficient for a showing of substantial competition, the Commission articulated a clear standard: “[t]he real issue is whether AT&T’s competitors have enough readily available capacity to constrain AT&T’s market behavior -- i.e., whether they have or could quickly acquire the capacity to take away enough business from AT&T to make monopoly pricing by AT&T unprofitable.”⁷¹ In other words, the “issue is whether AT&T’s rivals have enough readily available capacity to compete head-to-head with AT&T on an ongoing basis for any . . . customer that comes along.”⁷²

Today, competition for interstate transport services falls well short of this standard. As discussed earlier in these comments, there has been only limited facilities-based competitive entry with circuits terminating to a few buildings in the central business district of larger metropolitan areas. On all other routes, there is no competitive supply at all. In general, IXC’s rarely have any significant alternatives to ILEC multiplexing, interoffice transport or channel terminations between the end office and customer premises.

CLEC’s cannot “easily acquire” the capability to serve additional routes. The provision of competitive supply for interoffice transport requires the establishment of collocation sites, which take months to install and are priced well above their forward-looking economic cost. Expanding CLEC networks to provide a competitive source of supply for the channel terminations between the end office and customer premises is even more difficult, as it involves the costly and time-consuming task of building out from the limited fiber rings currently in

⁷¹Interexchange Order, 6 FCC Rcd at 5888.

⁷²Id.

service to thousands of high-capacity locations in each metropolitan area. Unbundled loops, which could in theory be used to provide DS1 channel terminations, are currently not a viable source of competitive supply because collocation space and UNEs are priced well above forward-looking economic cost and because ILEC OSS is not functional.

In no respect is the supply elasticity for transport services comparable to the supply elasticity in the interexchange market at the time that the Commission found that AT&T faced “substantial competition” for business services. In the Interexchange Order, the record showed that AT&T faced two national facilities-based providers that could immediately absorb 15 percent of AT&T’s traffic, and could substantially increase their networks’ capacity in five months’ time.⁷³ By contrast, the ILECs’ facilities-based competitors currently serve only a limited number of locations, can absorb zero demand on most routes in the market, can provide service to additional locations only by constructing new facilities, and can provide service to a substantial fraction of the ILECs’ transport customers only by making investments that, on a national scale, would cost billions of dollars.

Thus, before the Commission can find that supply elasticity justifies a finding of substantial competition, CLECs would have to develop the capability of serving a much greater number of routes than is the case today. Under present competitive conditions, ILECs could easily use contract pricing authority to target rate reductions to the limited number of routes for which there is a competitive source of supply, while charging higher rates to the many similarly-situated customers served by routes for which there is no competitive source of supply.

⁷³Interexchange Order, 6 FCC Rcd at 5888-89, ¶46.

In evaluating ILEC petitions for contract pricing authority, the Commission's analysis of supply elasticity should focus in the first instance on CLECs' own facilities. As the Commission discussed in the Second Further Notice, "[o]nce competitors have invested substantial sunk costs necessary to participate in the access market, the existence of those facilities will deter the incumbent from raising rates in the future."⁷⁴ For some transport elements, UNEs could deter predatory pricing by providing a less capital-intensive entry path, but only if they are available in quantity and at forward-looking economic cost.

The Commission's evaluation of supply elasticity will require comprehensive analysis of competitive conditions. While this analysis cannot be replaced by a simple checklist or "trigger," the Commission can streamline the process by establishing certain necessary, but not sufficient, indicia of supply elasticity that any ILEC applying for customer-specific pricing authority would have to demonstrate. These include:

- Collocation priced at forward looking economic cost;
- Unbundled loops available at geographically deaveraged forward looking economic cost;
- Functional OSS, permitting competitors to order elements in necessary quantities;
- CLECs collocated in offices serving 90% of DS1 channel terminations in the geographic area; and
- Shared Transport UNE available.

⁷⁴Second Further Notice, 11 FCC Rcd at 925.

iii. Market Share

In the Interexchange Order, the record showed that AT&T's share of the business services market was approximately 50 percent, in revenues and in minutes. The Commission found that this market share was "not incompatible with a highly competitive market," given the supply elasticity of AT&T's competitors and the demand-elasticity of business customers.⁷⁵

Market share figures are a valuable indicator of competitors' ability to compete for the incumbent's business. The Commission should in this proceeding establish market share thresholds that competitors would have to attain before a market could be deemed "substantially competitive." Drawing on the AT&T precedent, competitors should have to achieve at least a 50 percent market share in revenue terms or 50 percent of the channel terminations between end offices and customer premises. If the ILEC has any affiliates operating in the same area, their market share should be counted as part of the ILEC's market share.

The Commission should recognize that the transport market share measures typically used by the ILECs are extremely misleading. When arguing that competitors have made significant inroads, the ILECs typically report competitors' market share of "circuits" measured on a "DS1 equivalent" basis. This measure overstates CLECs' competitive inroads because it weights the type of facility for which ILECs have faced the most competition -- entrance facilities -- more heavily than if a revenue measure were used. When measured on a circuit basis, entrance facilities -- typically DS3s -- count the same as 28 interoffice DS1s or DS1 channel terminations. But when measured on a revenue basis, entrance facilities are much less

⁷⁵Interexchange Order, 6 FCC Rcd at 5889-5890.

significant.⁷⁶ A “DS1 equivalent” circuit-based market share measure could obscure an ILEC’s dominance of the more significant (in terms of revenues) multiplexing, interoffice transport, and channel terminations between the end office and the customer premises. The Commission should not use DS1-equivalent market share measures in evaluating ILEC petitions for contract pricing authority.

iv. Relative Cost Structures

The ILECs enjoy several cost advantages over new entrants. First, as the Commission has observed, new entrants are attempting to enter a market that is dominated by the incumbent provider, and may not have attracted a sufficient amount of business to achieve economies of scale.⁷⁷

Second, one of the most important factors inhibiting CAPs from expanding their networks to serve additional buildings is the refusal of most landlords to allow CAPs to provide service in their building without payment of compensation — compensation that is almost never demanded from the ILEC. This places CAPs at a competitive disadvantage in terms of the cost of providing service. Furthermore, the CAPs must make a difficult decision regarding the allocation of scarce capital. Ideally, given the necessity of paying building owners, the CAP would prefer to make the commitment to enter a building only after obtaining contracts to provide service to customers in that building. But given that the process of obtaining authority to

⁷⁶The per-DS1 cost of a DS3 is significantly less than the cost of a DS1, for circuits of the same mileage. Furthermore, mileage between the serving wire center and the end office is typically much greater than the mileage between the IXC POP and serving wire center.

⁷⁷In the Matter of Southwestern Bell Telephone Company, Tariff F.C.C. No. 73, Order Concluding Investigation and Denying Application for Review, 12 FCC Rcd 19311, 19337 (1997) (SWBT RFP Tariff Rejection Order).

enter a building after signing up a new contract may take months, CAPs may risk capital by committing to certain buildings prior to having a signed customer contract. Others will wait for the customer contract, but the resulting lengthy time for delivery of service will make the sales efforts more difficult.

Perhaps most importantly, the ILEC typically has significant influence over the CLEC's cost structure. A CLEC, if it does not build to all locations using its own facilities, must use ILEC facilities in some form if it is to offer a competitive service: it must collocate in ILEC central offices, incurring substantial costs for collocation space and cross-connects, and order unbundled loops or other ILEC facilities to provide a path between the end office and the customer premises. The ILEC's control over the pricing and provisioning of these elements gives it the incentive and ability to cripple its rivals. This is why it is essential that the Commission not grant customer-specific pricing flexibility until the ILEC has demonstrated that is providing these key inputs at forward-looking economic cost and in sufficient quantity.

4. Procedural Issues

An ILEC seeking contract pricing authority should be required to file a petition setting forth the geographic area for which contract pricing authority is sought and the evidence that it believes justifies a finding of "substantial competition"; the Commission would act on the ILEC petition within one year. The burden of proof should be on the ILEC to demonstrate the existence of substantial competition.

5. Intermediate Pricing Flexibility Is Not Required

Existing pricing flexibility is sufficient for the ILECs to respond to levels of competition that fall short of "substantial competition." For their transport services, the ILECs already have

the authority to offer term and volume discounts and to deaverage their services geographically by zone. The ILECs have also been granted pricing flexibility consistent with the “baseline” pricing flexibility proposed in the Second Further Notice in CC Docket No. 94-1. Among the reforms proposed in the Second Further Notice and implemented in the 1997 Third Report and Order were the elimination of the lower pricing band and the streamlined Part 69 waiver process for new services.⁷⁸ The Second Further Notice also proposed shorter notice periods for new services; these were implemented in the Tariff Streamlining Order, which found that Section 204(a)(3) of the Act permitted the ILECs to file new services tariffs on 15 days’ notice rather than 45 days.⁷⁹ In the same order, the ILECs obtained the authority to file rate reductions on only 7 days’ notice, and the authority to file tariffs with cost support under confidential cover.⁸⁰ ILECs now routinely file new services tariffs without public cost support.

At most, the Commission could consider simplifying the criteria governing density pricing zones. In the Special Access Expanded Interconnection Order, the Commission stated that LECs seeking to establish more than three zones shall be subject to increased scrutiny and must carefully justify the number of zones proposed in their density pricing plan.⁸¹ The Commission could consider relaxing the requirement that ILECs using more than three zones provide added justification, by allowing the ILECs to establish up to five zones without

⁷⁸Third Report and Order at ¶¶305-306, 309-310.

⁷⁹In the Matter of Implementation of Section 402(b)(1)(A) of the Telecommunications Act of 1996, Report and Order, 12 FCC Rcd 2170, 2188 (1997) (Tariff Streamlining Order).

⁸⁰Id. at 2214.

⁸¹In the Matter of Expanded Interconnection with Local Telephone Company Facilities, Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd 7369 at ¶179 n.413.

additional justification.⁸² These modified zone rules would address many of the excuses that ILECs have used in attempting to justify their minimal use of zone pricing flexibility.

C. There is No Need for the Commission to Establish a Switched Access Pricing Flexibility Framework

At this time, there is no need for the Commission to establish a pricing flexibility framework for switched access services, for three key reasons. First, there is virtually no competition for switched access services, nor any reasonable prospect that significant competition will develop in the foreseeable future. There remain significant barriers to entry in the local market, making it almost impossible for any carrier other than the ILEC to offer switched access services. As discussed earlier in these comments, the ILECs' market share of switched access minutes remains near 99 percent.

Second, the rate structure changes adopted in the Access Reform Order have corrected the major factor that the Commission had identified as affecting ILECs' ability to compete -- the possible incentives that per-minute recovery of NTS costs created for new entrants to target high-volume users.⁸³ The Access Reform Order increased the multiline business SLC, created the PICC, transferred NTS local switching costs to the SLC and PICC, and set in motion a process by which the per-minute CCL and TIC rates will be rapidly eliminated as separate rate elements.

Finally, as discussed in more detail below, many of the switched access pricing flexibility measures that the ILECs propose, including growth discounts, geographic deaveraging of

⁸²Because Zone 1 is typically very small, the ILECs should not be permitted to subdivide Zone 1 without added justification.

⁸³Access Reform Order at ¶69.

switching rates, and increasing the SBI upper limit, have no cost justification. These measures are therefore contrary to the Commission's objective of "mov[ing] interstate access prices to more economically efficient levels,"⁸⁴ and would simply permit the ILECs to discriminate unreasonably in the provision of access services or blunt the effects of any pricing pressure that may develop.

D. The Commission Should Reject the Ameritech and Bell Atlantic Proposals

Since the release of the Access Reform Order, Bell Atlantic and Ameritech have made pricing flexibility proposals in ex parte filings. Both ILECs propose complex three-phase pricing flexibility mechanisms that would grant additional pricing flexibility when an ILEC satisfies certain competitive tests. The competitive tests, and the corresponding streamlining, would vary depending on whether the ILEC was seeking additional pricing flexibility for transport or switched access services.

Both proposals are severely flawed. First, the Bell Atlantic and Ameritech proposals would blunt any pricing pressures that market forces could place on the inflated level of access charges. Both proposals are designed to maintain the ILECs' overall level of access revenues: they permit the ILECs to target rate reductions to customers or routes subject to competition, while at the same time increasing the rates charged where there is little or no competition.

Second, both proposals would permit the ILECs too much pricing flexibility too soon. In the absence of competitive sources of supply, the ILECs could (1) discriminate unreasonably in the provision of interstate transport services, thereby distorting competition in the interexchange

⁸⁴Access Reform Notice at ¶161.

market; and (2) target rate reductions in such a manner as to preempt the development of competition for local exchange and access services.

1. The Bell Atlantic and Ameritech Proposals Would Grant Contract Pricing Authority Prematurely

Both Bell Atlantic and Ameritech would condition contract pricing authority on competitive tests that fall well short of the “substantial competition” standard required by Commission precedent. For example, Ameritech asks the Commission to grant the ILECs contract pricing authority for transport services once 100 DS1 equivalent cross-connects have been taken in a state. Bell Atlantic asks the Commission to grant the ILECs contract pricing authority for transport services once a competitor has facilities in wire centers serving 25 percent of the ILEC demand in the market area. For switched access services, Ameritech proposes to condition contract pricing authority on the existence of an interconnection agreement or Statement of Generally Available Terms (SGAT) for UNEs, transport and termination, and resale. As a practical matter, these “tests” are no test at all: Ameritech would receive contract pricing authority throughout its region today, while Bell Atlantic would receive contract pricing authority in all but a few LATAs in its region.

There is no reasonable basis for the Commission to abandon the substantial competition standard and permit contract pricing authority based on such a limited competitive showing. The Commission has consistently recognized that, absent substantial competition, dominant carriers can use customer-specific pricing to discriminate unreasonably. An ILEC would, in particular, have the ability to discriminate in favor of its own interexchange affiliate and thereby distort competition in the interexchange market.

Contract tariff authority at the current level of competition, or at any level of competition less than “substantial competition,” also makes it possible for the ILEC to deter entry through targeted rate reductions. As discussed above, the Commission granted contract pricing authority to AT&T in large part because it found that the sunk costs associated with MCI and Sprint’s extensive networks made successful predation unlikely. At the current level of competitive entry, by contrast, an ILEC could use targeted price reductions to send a message to potential competitors and thereby deter entry.

2. Many of the Pricing Flexibility Measures Proposed by the ILECs Should Not be Permitted Prior to a Finding of Nondominance

Most of the other pricing flexibility measures that Bell Atlantic and Ameritech propose have no cost justification, and therefore should not be permitted as long as the ILEC remains a dominant carrier.

Growth Discounts: Growth discounts are pricing plans that offer reduced prices based on growth in traffic placed over an incumbent LEC’s network. Bell Atlantic proposes that ILECs be permitted to offer growth discounts for transport services almost immediately, in Phase I of its three-phase framework, while Ameritech considers growth discounts to be a Phase II measure.

The ILECs have never been able to demonstrate that there is any cost justification for growth discounts. Such discounts are therefore more than a mechanism by which the ILEC can discriminate in favor of its own interexchange affiliate, which is beginning service at a zero base and whose traffic is therefore growing rapidly.

Geographic deaveraging without reference to zone structure Ameritech proposes that, in Phase 2 of its three-phase framework, ILECs could geographically deaverage transport rates

without reference to density zones. But such deaveraging would simply permit Ameritech to target rate reductions to areas where it faced competition, while charging higher rates to similarly-situated customers in areas where competition had not developed. The current rules, which require a cost basis for the ILECs' transport pricing zones, prevent such unreasonable discrimination.

Increasing the SBI Upper Limit Both Ameritech and Bell Atlantic's proposals would increase the SBI upper limit to +10 percent from the current +5 percent. Ameritech would permit this measure to take effect in Phase I of its proposal, while Bell Atlantic would permit this measure to take effect in Phase II of its proposal.

There is no cost justification for permitting ILEC access rates to increase by 10 percent relative to the PCI change. There has been no demonstration that any ILEC rates are below forward-looking economic cost. The rapid rate increases that would be permitted by the proposed increase in the SBI upper limit would allow the ILECs to increase rates more rapidly for less competitive services or in less competitive geographic areas.

Deaveraging of Local Switching Rates There is no evidence that there is a cost basis for geographic deaveraging of local switching rates. No negotiation or arbitration conducted under Section 252 of the Act has yet resulted in geographically deaveraged local switching rates. Therefore, geographic deaveraging of local switching rates is not required for incumbent LECs to be able to respond to new entrants. Deaveraging of local switching rates would permit the ILEC to engage in selective access charge reductions in order to respond to competition, while maintaining or increasing inflated local switching rates in other areas.

3. The ILECs' Proposed "Triggers" Are Inadequate Indicators of Competition

Both Bell Atlantic and Ameritech's competitive "triggers" focus almost exclusively on "addressability"; they require almost no evidence of an actual competitive presence or of significant supply elasticity. In the Bell Atlantic and Ameritech transport pricing flexibility proposals, the only evidence of competitive entry considered by the triggers is the 100 cross-connect requirement for Phase 1. For switched access, Ameritech would require no demonstration of actual competition; Bell Atlantic would require only that 100 UNEs be purchased by competitors.

The competitive triggers proposed by Bell Atlantic and Ameritech are inadequate because they provide no indication of competitors' ability to constrain ILEC pricing or prevent anticompetitive practices. For example, Bell Atlantic would grant contract pricing authority if a CLEC had facilities in wire centers representing 25 percent of the overall market's demand. Obviously, the mere presence of a CLEC's fiber somewhere in the wire center says nothing about the CLEC's ability to constrain the ILEC's transport pricing. To actually serve customers, the CLEC would have to build extensive facilities from the existing fiber to customer locations.

Similarly, Ameritech's transport trigger requires only that a competitor have established a collocation site in a wire center. Focusing on collocation alone ignores the fact that the competitors do not currently have access to unbundled loops priced at forward-looking economic cost; without unbundled loops, a collocated competitor cannot provide an alternative to Ameritech's channel terminations. Ameritech's proposed trigger also fails to take into account

the anticompetitive effects of (1) collocation and cross-connect charges that are well in excess of cost.

Furthermore, both Bell Atlantic and Ameritech's transport triggers use "DS-1 equivalent" measures. As discussed above, "DS1-equivalent"-based triggers give disproportionate weight to entrance facility -- the one element for which there is some competitive supply -- while obscuring continued ILEC market power in the provision of multiplexing, interoffice transport, and channel terminations.

The Bell Atlantic and Ameritech proposals demonstrate that simple indicators cannot be used as a trigger when there is a significant risk of competitive harm. As the Commission recognized in the Access Reform Notice, "the real significance of any particular competitive presence in the marketplace often only becomes clear after analyzing several different variables that measure competition."⁸⁵ Only the type of analysis that the Commission conducted in the AT&T proceedings -- evaluating demand elasticity, supply elasticity, market share, cost structures, and the incumbent's pricing behavior -- can ensure that pricing flexibility is not granted prematurely.

4. The X Factor Should Not Be Reduced As Competition Increases

Both the Bell Atlantic and Ameritech proposals call for the X-Factor to be reduced as each phase of the pricing flexibility framework is implemented. They never explain why these reductions in the X Factor would be appropriate, other than asserting that "[t]he X-Factor . . . acts as a disincentive for ILECs to invest additional capital into the network infrastructure."⁸⁶

⁸⁵Access Reform Notice at ¶204.

⁸⁶Ameritech ex parte.

The X Factor should not be reduced as competition increases because there is no reason to expect that ILEC productivity growth will slow as competition increases. Indeed, it would be expected that competitive pressures would provide an added incentive for the ILEC to achieve higher levels of productivity growth. The Commission rejected a similar AT&T request in 1995, noting that AT&T had not provided “cost data . . . or other information that demonstrate that it cannot continue to match or exceed the 3 percent productivity gains in providing basic schedule services.”⁸⁷

The proposed reduction in the X-Factor is just another attempt by the ILECs to blunt any pricing pressure that may develop. If the X-Factor were reduced, the ILECs could charge higher rates for non-competitive services for which the price cap regime was the only pricing constraint. The ILEC could use the increased revenues from less-competitive services to offset any pricing pressures that may develop for more competitive services.

VII. Conclusion

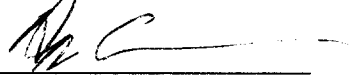
The “market-based” approach to access charge reform has yielded little in the way of reform. Instead, the ILECs have done everything within their power to thwart competition and preserve the monopoly revenue stream provided by access charges. The Commission should now put consumers, competition, and economic growth ahead of the preservation of monopoly revenues by lowering the ILECs’ excessive access charges by \$10 billion to their forward-looking economic cost.

⁸⁷In the Matter of Revisions to price Cap Rules for AT&T Corp., Report and Order, CC Docket No. 93-197, 10 FCC Rcd 3009, 3021 (1995).

Given the insubstantial development of local competition, the Commission should refrain from granting additional pricing flexibility at this time. Indeed, for most switched access services, the near-complete lack of competition makes pricing flexibility utterly inconceivable. However, for some transport services the Commission should establish a framework for the evaluation of future requests for additional pricing flexibility. Within in that framework, ILECs could receive additional pricing flexibility upon a showing of “substantial competition.” No ILEC would be treated as nondominant unless it could be shown to lack market power in the local exchange and exchange access markets.

Litigation and ILEC intransigence have sidetracked the development of local competition. In this circumstance, the Commission's continued reliance on its market-based approach would reward the ILECs for their ability to thwart the development of competition for local exchange and exchange access services.

Respectfully submitted,
MCI WORLDCOM, Inc.



Don Sussman
Alan Buzacott
Chris Frentrup
Henry G. Hultquist
Elizabeth A. Yockus
Richard S. Whitt
Mary L. Brown
1801 Pennsylvania Avenue, NW
Washington, DC, 20006
(202) 887-2779

Its Consultant:
Andrew Regitsky
Regitsky & Associates
12013 Taliesin Place, Suite 32
Reston, VA 20190
703-787-6735

October 26, 1998

CERTIFICATE OF SERVICE

I, Vivian I. Lee, do hereby certify that copies of the foregoing Comments In the Matter to Update and Refresh Record for Access Charge Reform and Seeks Comment on Proposals for Access Charge Reform Pricing Flexibility were sent via first class mail, postage paid, to the following on this 26th Day of October 1998.

Chairman William Kennard**
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, DC 20554

Commissioner Harold Furchtgott-Roth**
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, DC 20554

Commissioner Michael Powell**
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, DC 20554

Commissioner Gloria Tristani**
Federal Communications Commission
1919 M Street, N.W., Room 826
Washington, DC 20554

Commissioner Susan P. Ness**
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, DC 20554

Kathryn C. Brown**
Chief of Staff
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, DC 20554

Jane Jackson**
Chief, Competitive Pricing Division
Federal Communications Commission
Room 518
1919 M Street, N.W.
Washington, DC 20554

Lawrence Strickling**
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 658
Washington, DC 20554

James Schlichting**
Deputy Chief, Common Carrier Bureau
Federal Communications Commission
Room 500
1919 M Street, N.W.
Washington, DC 20554

Tom Power**
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, DC 20554

James Casserly**
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, DC 20554

Paul Gallant**
Federal Communications Commission
1919 M Street, N.W., Room 826
Washington, DC 20554

Kyle Dixon**
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, DC 20554

Kevin Martin**
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, DC 20554

International Transcription Services**
1231 20th Street, N.W.,
Washington, DC 20036

Judy Nitsche**
Federal Communications Commission
1919 M Street, NW
Room 518
Washington, DC 20554

John Scott**
Federal Communications Commission
1919 M Street, NW
Room 518
Washington, DC 20554

Peyton Wynns**
Federal Communications Commission
Industry Analysis Division
2033 M Street, NW
Suite 500
Washington, DC 20554

Jose Rodriguez**
Federal Communications Commission
Accounting & Audits Division
2000 L Street NW
Room 812
Washington, DC 20554

Kathleen Q. Abernathy
David A. Gros
AirTouch Communications, Inc.
1818 N Street, N.W.
Washington, DC 20036

Pamela Riley
AirTouch Communication, Inc.
One California Street, 9th Floor
San Francisco, CA 94111

Mary Newmeyer
Alabama Public Service Commission
P.O. Box 991
Montgomery, AL 36101

Scott L. Smith
Alaska Telephone Association
4341 B Street, Suite 304
Anchorage, AK 99503

Carol C. Henderson
American Library Association
1301 Pennsylvania Avenue, N.W.
Suite 403
Washington, DC 20004

Joseph Di Bella
Edward Shakin
Bell Atlantic
1320 North Court House Road
Eighth Floor
Arlington, VA 22201

Michael S. Pabian
Counsel for Ameritech
Room 4H82
2000 West Ameritech Center Drive
Hoffman Estates, IL 60196-1025

M. Robert Sutherland
Richard M. Sbaratta
Rebecca M. Lough
BellSouth Telecommunications, Inc.
Suite 1700
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

Wendy S. Bluemling
Director, Regulatory Affairs
SNET
227 Church Street
New Haven, CT 06510

Gail L. Polivy
GTE
1850 M Street, NW
Suite 1200
Washington, DC 20036

Richard A. Karre
Jeffrey A. Brueggeman
U S West, Inc.
Suite 700
1020 19th Street, N.W.
Washington, DC 20036

Robert M. Lynch
Durward D. Dupre
Michael J. Zpevak
Thomas A. Pajda
SBC
One Bell Plaza - Room 3003
Dallas, TX 75202

Nancy C. Woolf
SBC
140 New Montgomery Street
Room 1529
San Francisco, CA 94105

Nancy Rue (0047337)
Frost & Jacobs LLP
2500 PNC Center
201 East Fifth Street
Cincinnati, OH 45202

David C. Olson
Cincinnati Bell Telephone Company
201 East Fifth Street
Cincinnati, OH 45202

Richard M. Tettelbaum
Associate General Counsel
Citizens Communications
Suite 500, 1400 16th Street, N.W.
Washington, DC 20036

Robert A Mazer
Albert Sholdiner
Vinson & Elkins
1455 Pennsylvania Avenue, NW
Washington, DC 20004-1008

Jay C. Keithley
Sprint LTC
1850 M Street N.W., 11th Floor
Washington, DC 20036-5807

Sandra K. Williams
Sprint LTC
P.O. Box 11315
Kansas City, MO 64112

Nanette S. Edwards
Regulatory Affairs Manager
ITC Deltacom Communications, Inc.
700 Boulevard South, Suite 101
Huntsville, AL 35802

Russell M. Blau
Morton J. Posner
Swidler & Berlin
3000 K Street, NW, Suite 300
Washington, DC 20007

Michael J. Shortley, III
Frontier
180 South Clinton Avenue
Rochester, NY 14646

Gene C. Schaerr
Scott M. Bohannon
Carl D. Wasserman
AT&T
1722 I Street, NW
Washington, DC 20006

Allen Gibson
AT&T Corporation
1 Oak Way
Room 2WC205
Berkeley Heights, NJ 07922

Joel Ader
Bellcore
2101 L Street, N.W., Suite 600
Washington, DC 20036

Mark C. Rosenblum
Peter H. Jacoby
Judy Sello
AT&T
295 North Maple Avenue, Room 3245I1
Basking Ridge, NJ 07920

Teresa Marrero
Teleport Communications Group, Inc.
Two Teleport Drive
Suite 300
Staten Island, NY 10311

Glenn B. Manishin
Christine A. Mailloux
Blumenfeld & Cohen -
Technology Law Group
1615 M Street, N.W., Suite 700
Washington, DC 20036

Kent Larsen
Cathey, Hutton and Associates
2711 LBJ Freeway, Suite 560
Dallas, TX 75234

Wayne Leighton
Citizens for a Sound Economy Foundation
1250 H Street, NW, Suite 700
Washington, DC 20005

Ronald J. Binz
Debra R. Berlyn
John Windhausen, Jr.
Competition Policy Institute
1156 15th Street, NW, Suite 310
Washington, DC 20005

James Love
Consumer Project on Technology
P.O. Box
Washington, DC 20036

Joe D. Edge
Tina M. Pidgeon
Drinker Biddle & Reath
901 15th Street, NW, Suite 900
Washington, DC 20005

Clint Frederick
Frederick & Warinner, LLC
10901 West 84th Terrace, Suite 101
Lenexa, KS 66214

Charles H. Helein
Robert M. McDowell
Helein & Associates, PC
8180 Greensboro Drive, Suite 700
McLean, VA 22101

Charles C. Hunter
Catherine M. Hannan
Hunter & Mow, PC
1620 I Street, NW, Suite 701
Washington, DC 20006

David A. Irwin
Tara S. Becht
Irwin, Campbell & Tannenwald, PC
1730 Rhode Island Avenue NW
Suite 200
Washington, DC 20036

Daniel L. Brenner
David L. Nicoll
Counsel for the National Cable
Television Association
1724 Massachusetts Avenue, NW
Washington, DC 20036

Steven G. Sanders
Northern Arkansas Telephone Co., Inc.
301 East Main Street
Flippin, AR 72634

Ronald L. Plessner
Mark O'Connor
James J. Halpert
Piper & Marbury LLP
1200 19th Street, NW, Suite 700
Washington, DC 20036

Roger Hamilton
Ron Eachus
Joan H. Smith
Public Utility Commission of Oregon
550 Capitol Street NE
Salem, OR 97310

Pat Wood III
Robert W. Gee
Public Utility Commission of Texas
1701 N. Congress Avenue
Austin, TX 78711

Anne U. MacClintock
The Southern New England Telephone Co.
227 Church Street
New Haven, CT 06510

Edwin N. Lavergne
J. Thomas Nolan
Ginsburg, Feldman & Bress, Chartered
1250 Connecticut Ave, NW
Washington, DC 20036

Stephen G. Kraskin
Sylvia Lesse
Thomas J. Moorman
Kraskin & Lesse
2120 L Street, NW, Suite 520
Washington, DC 20037

Ronald Dunn
Information Industry Association
1625 Massachusetts Avenue, N.W.
Suite 700
Washington, DC 20036

Margot Smiley Humphrey
Koteen & Naftalin, LLP
1150 Connecticut Avenue, NW, Suite 1000
Washington, DC 20036

Colleen Boothby
James S. Blaszak
Kevin S. DiLallo
Levine, Blaszak, Block & Boothby
1300 Connecticut Avenue, NW, Suite 500
Washington, DC 20036

Henry D. Levine
Laura FH McDonald
Levine, Blaszak, Block & Boothby
1300 Connecticut Avenue, NW, Suite 500
Washington, DC 20036

Joseph S. Payke
Andrew Jay Schwartzman
Gigi B. Sohn
Media Access Project
1707 L Street, NW, Suite 400
Washington, DC 20036

Jack Krumholtz
Law & Corporate Affairs Department
Microsoft Corporation
5335 Wisconsin Avenue, NW, Suite 500
Washington, DC 20015

Stanley M. Gorinson
Preston Gates Ellis & Rouvelas Meeds
1735 New York Avenue, NW
Washington, DC 20006

Donna N. Lampert
James A. Kirkland
Mintz, Levin, Cohn, Ferris, Glovsky
and Popeo, PC
701 Pennsylvania Avenue, NW, Suite 900
Washington, DC 20004

John Rother, Esq.
American Association of Retired Persons
601 E Street, NW
Washington, DC 20049

Richard J. Johnson
Michael J. Bradley
Moss & Barnett
4800 Norwest Center
90 South Seventh Street
Minneapolis, MN 55420

David J. Newburger
Newburger & Vossmeier
One Metropolitan Square, Suite 2400
St. Louis, MO 63102

Scott J. Rubin, Esq.
Counsel for Pennsylvania Internet Service
Providers
3 Lost Creek Drive
Selinsgrove, PA 17870

R. Michael Senkowski
Jeffrey S. Linder
Gregory J. Vogt
Wiley, Rein & Fielding
1776 K Street, NW
Washington, DC 20006

Peter A. Rohrbach
David L. Sieradzki
F. William LeBeau
Hogan & Hartson LLP
555 13th Street, NW
Washington, DC 20004

Michael J. Ettner
Jody B. Burton
General Services Administration
18th & F Streets, NW, Room 4002
Washington, DC 20405

Kathy L. Shobert
General Communication, Inc.
901 15th Street, NW, Suite 900
Washington, DC 20005

Thomas K. Crowe
Michael B. Adams, Jr.
Law Offices of Thomas K. Crowe, PC
2300 M Street, NW, Suite 800
Washington, DC 20037

Mark J. Golder
Robert L. Hoggarth
Personal Communications Industry
500 Montgomery Street, Suite 700
Alexandria, VA 22314

Steven T. Nourse
Public Utilities Section
180 E. Broad Street
Columbus, OH 43215

John J. List
Rural Telephone Finance Cooperative
2201 Cooperative Way
Herndon, VA 20171

Reginald R. Bernard
SDN Users Association, Inc.
P.O. Box 4014
Bridgewater, NJ 08807

W. Fred Seigneur
Sonetech, Inc.
109 Kale Avenue
Sterling, VA 20164

Michael S. Fox
John Staurulakis, Inc.
6315 Seabrook Road
Seabrook, MD 20706

Randolph J. May
Bonding Yee
Sutherland, Asbill & Brennan
1275 Pennsylvania Avenue, NW
Washington, DC 20004

F. Stephen Lamb
TCA, Inc. -- Telecommunications
Consultants
3617 Betty Drive, Suite I
Colorado Springs, CO 80907

Lyman C. Welch
190 S. LaSalle St. #3100
Chicago, IL 60603

Jonathan Jacob Nadler
Squire, Sanders & Dempsey LLP
1201 Pennsylvania Avenue, N.W.
Box 407
Washington, DC 20044

Mary McDermott
Linda Kent
Hance Haney
United States Telephone Association
1401 H Street, N.W., Suite 600
Washington, DC 20005

Robert J. Aamoth
Jonathan E. Canis
Reed Smith Shaw & McClay
1301 K Street, NW
Suite 1100-East Tower
Washington, DC 20005

Marlin D. Ard
Nancy C. Woolf
Pacific Telesis Group
140 New Montgomery Street
San Francisco, CA 94105

Margaret E. Garber
Pacific Telesis Group
140 New Montgomery Street
Washington, DC 20004

Brian Conboy
Thomas Jones
Gunmar Halley
Wilkie Farr & Gallagher
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20036

Randall B. Lowe
Piper & Marbury
1200 19th Street, N.W.
Washington, DC 20036

Mary Rouleau, Esq..
Dr. Mark N. Cooper
Consumer Federation of America
1424 16th Street, N.W., Suite 604
Washington, DC 20036

Mary Rouleau, Esq..
Dr. Mark N. Cooper
Consumer Federation of America
1424 16th Street, N.W., Suite 604
Washington, DC 20036

Consumers Union
1666 Connecticut Avenue, NW
Washington, DC 20036

Danny E. Adams
Edward A. Yorkgitis, Jr.
Kelley Drye & Warren, LLP
1200 19th Street, N.W., Suite 500
Washington, DC 20036

Gary L. Mann
IXC Long Distance, Inc.
98 San Jacinto, Suite 700
Austin, TX 78701

Albert H. Kramer
Dickstein Shapiro Morin & Oshinsky LLP
2101 L Street, NW
Washington, DC 20037

Gregory M. Casey
Douglas W. Kinkoph
LCI International Telecom Corp.
8180 Greensboro Drive, Suite 800
McLean, VA 22101

Mitchell F. Brecher
Fleischman and Walsh, LLP
1400 16th Street, N.W.
Washington, DC 20036

Dr. Barbara O'Connor
Gerald Depo
Alliance for Public Technology
901 15th Street, N.W.
Washington, DC 20005

Christopher W. Savage
Cole, Raywid & Braverman, LLP
1919 Pennsylvania Avenue, Suite 200
Washington, DC 20006

James Bradford Ramsay
National Association of Regulatory
Utility Commissioners
1201 Constitution Avenue, Suite 1102
Washington, DC 20044

Martha S. Hogerty
Office of the Public Counsel
P.O. Box 7800
Jefferson City, MO 65102

Mary E. Burgess
Office of the General Counsel
NYS Department of Public Service
Three Empire State Plaza
Albany, NY 12223

James A. Burg
Pam Nelson
South Dakota Public Utilities Commission
State Capitol
Pierre, SD 575021

Dr. Norman K. Meyers
Ozarks Technical Community College
P.O. Box 5958
Springfield, MO 65801

David C. Bergmann
Ohio Consumers' Counsel
77 South High Street, 15th Floor
Columbus, OH 43266

Laurie Pappas
Office of Public Utility Counsel
1701 N. Congress Avenue, 9-180
P.O. Box 12397
Austin, TX 78711

Brian R. Moir
Moir & Hardman
2000 L Street, N.W., Suite 512
Washington, DC 20036

Lawrence D. Crocker, III
Public Service Commission of DC
717 14th Street, N.W.
Washington, D.C. 20005

Peter Arth, Jr.
Lionel B. Wilson
Mary Mack Adu
Public Utilities Commission of the
State of California
505 Van Ness Avenue
San Francisco, CA 94102

Kent Larsen
Cathey, Hulton and Associates
2711 LBJ Freeway, Suite 560
Dallas, TX 75234

David Cosson
L. Marie Guillory
NTCA
2626 Pennsylvania Avenue, NW
Washington, DC 20037

Lisa M. Zaina
Kenneth Johnson
OPASTCO
21 Dupont Circle, NW., Suite 700
Washington, DC 20036

George Petrutsas
Paul H. Feldman
Fletcher, Heald & Hildreth, PLC
1300 North 17th Street, 11th Floor
Rosslyn, VA 22209

Cynthia B. Miller
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399

Gary M. Epstein
James H. Baker
Latham & Watkins
1001 Pennsylvania Ave, N.W.
Suite 1300
Washington, DC 20004


Joanne Salvatore Bochis
Perry S. Goldschein
National Exchange Carrier Assn, Inc.
100 South Jefferson Road
Whippany, NJ 07981

Kenneth T. Burchett
GVNW Inc./Management
7125 S.W. Hampton
Portland, OR 97223

Emily M. Willaims
Assn. For Local Telecommunications
Services
1200 19th Street, N.W., Suite 560
Washington, DC 20036

Luin Fitch
U.S. Department of Justice
555 Fourth Street, N.W., 8th Floor
Washington, DC 20001

****HAND DELIVERED**

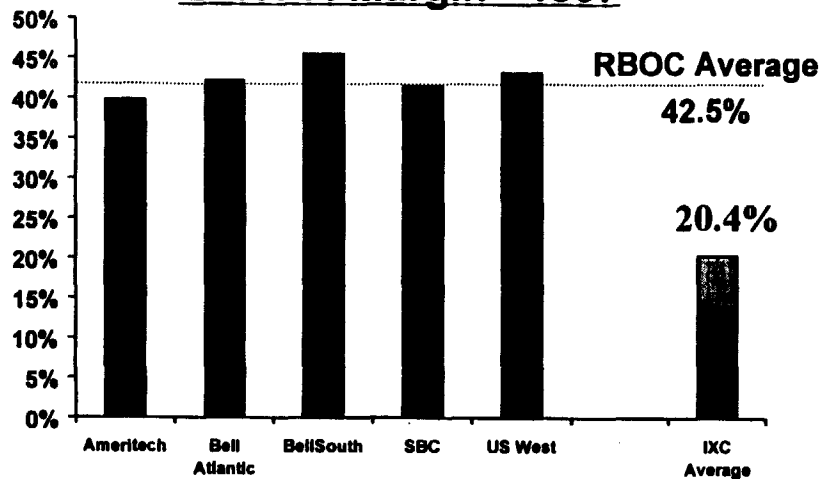

Vivian I. Lee

Appendix A

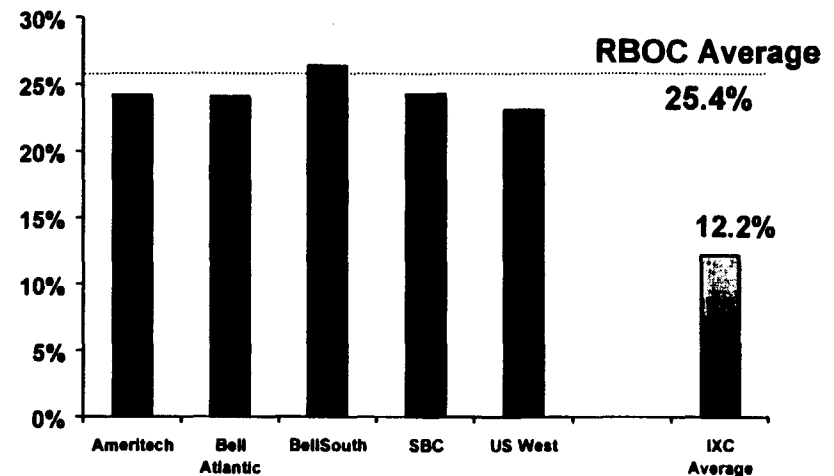
RBOC Financials

RBOCs Continue to Report Monopoly Profits

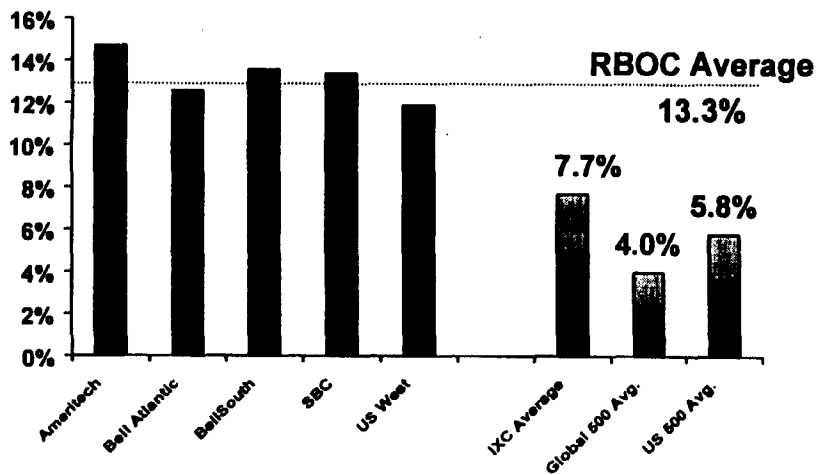
EBITDA Margin - 1997



Operating Margin - 1997



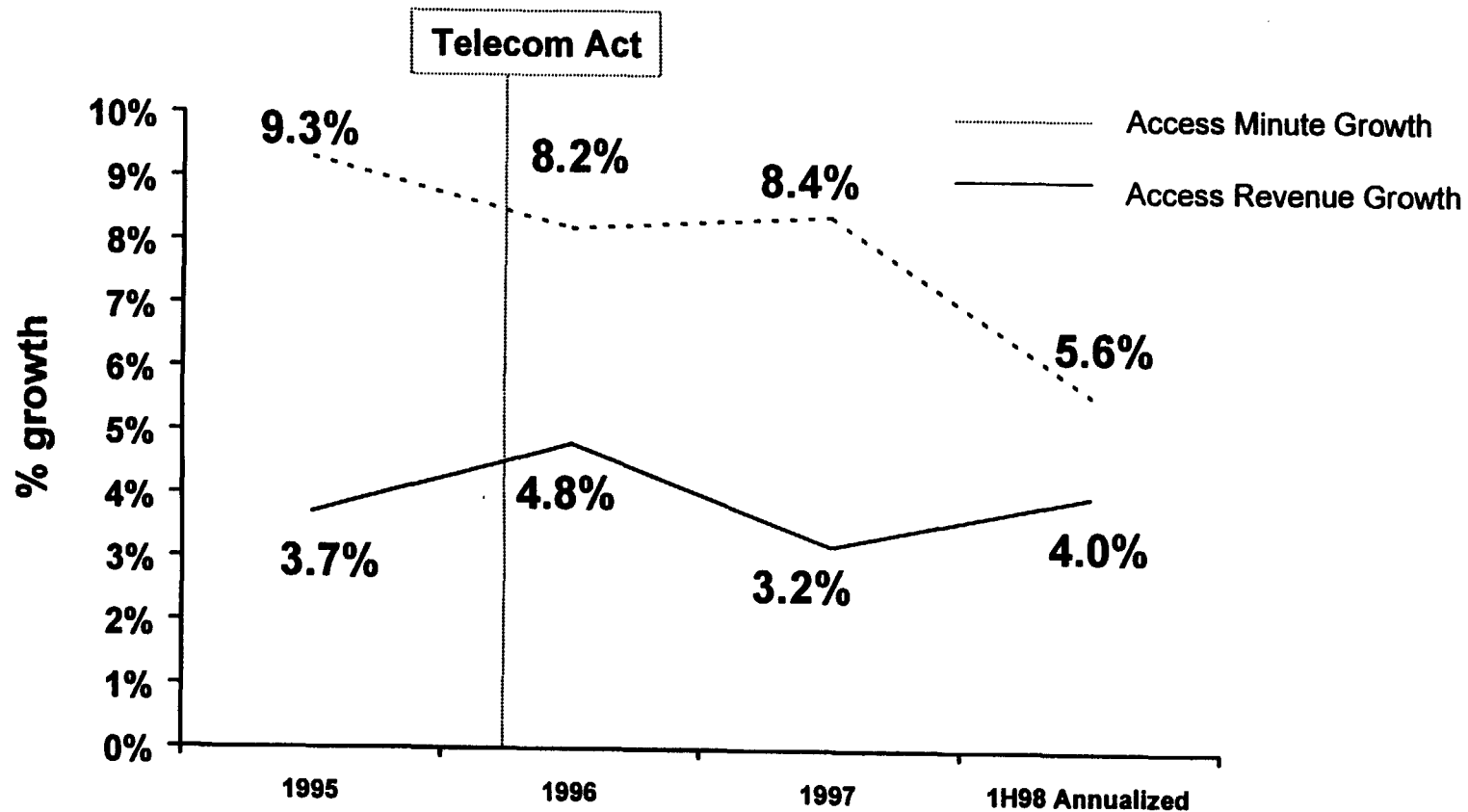
Net Income Margin - 1997



NOTE:

- All RBOC and IXC figures have been normalized, and exclude one-time charges
- IXC includes AT&T, MCI, and Sprint
- Sprint LD only for EBITDA and Operating Income; consolidated for Net Income

Despite Access Reform, RBOC Access Revenue Continues to Increase



All figures have been normalized for one-time charges

RBOCs and GTE Have Higher Profit Margins Than Most IXC's and Most Monopolies

	1997 Net Margin
Telebras	24.7%
Cable & Wireless	18.4%
Ameritech	14.7%
BellSouth	13.6%
SBC	13.4%
GTE	13.2%
Bell Atlantic	12.6%
US West	11.9%
BT	10.7%
Telstra	10.1%
France Telecom	9.5%
Royal KPN	8.9%
AT&T	8.7%
Telefonica	8.0%
Sprint	6.4%
Telecom Italia	6.1%
Deutsche Telekom	4.9%
MCI	4.0%
NTT	3.1%
Alcatel	2.5%
Swiss Post	1.6%
DDI	0.7%

Source: 1998 Fortune Global 500
RBOCs, GTE and IXC's normalized for one-time charges

The RBOCs and GTE are Among The Most Profitable Companies in the World

- Individually, the RBOCs and GTE all rank in Fortune's top 50 global companies
- Not one US-based IXC is in the top 50

	Company	1997 Net Margin
1	Microsoft	30.4%
2	Petroliam Nasional Berhad	28.4%
3	Intel	27.7%
4	Sociedad Estatal De Part. Ind.	25.6%
5	Telebras SA	24.7%
6	Glaxo Wellcome	23.2%
7	Coca-Cola	21.9%
8	Merck	19.5%
9	Bristol-Myers Squibb	19.2%
10	C&W	18.4%
11	Berkshire Hathaway	18.2%
12	Pfizer	17.7%
13	Abbott Laboratories	17.6%
14	Lloyds TSB	17.1%
15	Texas Instruments	17.1%
16	Novartis	16.7%
17	RAO Gazprom	16.4%
18	First Chicago NBD	15.1%
19	Hsbc Holdings	14.7%
20	Ameritech	14.7%
21	Johnson & Johnson	14.6%
22	McDonald's	14.4%
23	American Home Products	14.4%
24	Gillette	14.2%
25	NationsBank	14.2%

	Company	1997 Net Margin
26	Minnesota Mining	14.1%
27	Norwest	14.0%
28	Smithkline Beecham	13.8%
29	National Australia Bank	13.8%
30	Petroleos de Venezuela	13.7%
31	BankAmerica	13.6%
33	BellSouth	13.6%
34	SBC	13.4%
35	Halifax PLC	13.4%
36	First Union	13.2%
37	GTE	13.2%
38	IRI	12.9%
39	Bell Atlantic	12.6%
40	Allstate	12.4%
41	Chase Manhattan	12.2%
42	Schlumberger	12.1%
43	Wells Fargo	12.0%
44	Nokia	11.9%
45	US West	11.9%
46	Bank of Nova Scotia	11.5%
47	Philip Morris	11.2%
48	American Express	11.2%
49	Unilever NV/PLC	11.2%
50	Abbey National	11.0%

Note: RBOCs and GTE normalized for one-time charges
Source: 1998 Fortune Global 500

The RBOCs and GTE are Among The Most Profitable Companies in the World

- Taken collectively and apart from the other telecoms on the Fortune list, the RBOCs/GTE comprise the fourth most profitable business category in the world

Industry	1997 Rev.	1997 Net Inc.	1997 Net Margin
1 Electronics, Semiconductors	35.6	8.8	24.6%
2 Computer Services and Software	26.6	4.2	15.7%
3 Pharmaceuticals	161.8	24.5	15.1%
4 RBOCs/GTE	125.6	16.7	13.3%
5 Diversified Financial	97.5	9.5	9.8%
6 Beverages	83.1	8.1	9.8%
7 Tobacco	97.0	8.4	8.7%
8 Soaps, Cosmetics	56.7	4.8	8.5%
9 Insurance: P&C (mutual)	55.6	4.4	7.8%
10 Telecommunications (all)	534.2	40.4	7.6%
11 Scientific, Photo, Control Equip.	41.0	2.8	6.9%
12 Securities	75.7	5.1	6.8%
13 Industrial and Farm Equipment	148.3	9.1	6.1%
14 Metal Products	32.8	2.0	6.1%
15 Entertainment	70.2	4.1	5.9%
16 Petroleum Refining	945.2	54.9	5.8%
17 Airlines	120.3	7.0	5.8%
18 Telecom (non-RBOC)	408.6	23.7	5.8%
19 Computers, Office Equipment	264.4	14.9	5.6%
20 Insurance: P&C (stock)	351.1	19.2	5.5%
21 Food	258.8	13.4	5.2%
22 Energy	110.5	5.0	4.5%
23 Chemicals	294.5	12.0	4.1%

Industry	1997 Rev	1997 Net Inc.	1997 Net Margin
24 Banks: Commercial & Savings	1,243.2	49.4	4.0%
25 Building Materials, Glass	29.3	1.1	3.9%
26 Rubber and Plastic Products	44.7	1.5	3.5%
27 Publishing, Printing	47.0	1.6	3.4%
28 Specialist Retailers	119.3	3.9	3.2%
29 Aerospace	154.4	4.8	3.1%
30 Insurance: Life, Health (stock)	425.9	13.1	3.1%
31 Utilities, Gas and Electric	307.2	9.0	2.9%
32 Motor Vehicles and Parts	1,150.8	33.6	2.9%
33 Insurance: Life, Health (mutual)	410.8	11.9	2.9%
34 Electronics, Electrical Equip.	782.4	21.5	2.7%
35 Forest and Paper Products	78.1	2.1	2.6%
36 General Merchandisers	373.3	9.7	2.6%
37 Mining, Crude-oil Production	60.5	1.5	2.5%
38 Railroads	96.8	2.3	2.4%
39 Mail, Package, Freight Delivery	168.7	4.0	2.3%
40 Metals	168.9	3.1	1.9%
41 Food and Drug Stores	486.4	8.8	1.8%
42 Hotels, Casinos, Resorts	24.8	0.4	1.4%
43 Wholesalers	133.9	1.4	1.0%
44 Engineering, Construction	150.3	1.1	0.7%
45 Health Care	39.6	0.1	0.3%
46 Trading	1,013.1	2.7	0.3%

Note: RBOCs and GTE normalized for one-time charges
Source: 1998 Fortune Global 500

RBOCs and Wall Street Analysts Agree That Access Reform Has Had Little Impact on the RBOCs

"...we were able to absorb more than half of a billion dollars in mandated rate reductions in the year [1997] and still continue to grow and meet our 10 to 20 percent EPS target."

Raymond Smith, Bell Atlantic's Chairman and CEO -- January 21, 1998 (FY97 earnings release)

"...our strong volumes will serve as the foundation for top-line growth in the second half of the year, as we move past the effects of last July's access charge reductions..."

Ivan Seidenberg, Vice Chairman, President and CEO of Bell Atlantic -- July 23, 1998 (2Q98 earnings release)

"BellSouth...was not affected by mandated rate reductions as these were offset by intrastate rate increases."

Warburg Dillon Read -- July 22, 1998

Ameritech

- Despite access reform, margins remain high

	1996	1997	1Q98	2Q98	3Q98
EBITDA margin	37.4%	39.9%	40.5%	42.8%	40.8%
Operating margin	23.5%	24.2%	24.4%	27.1%	24.8%
Net income margin	14.2%	14.7%	14.3%	16.2%	15.0%

- Earnings continue with double-digit growth

	1996	1997	1Q98	2Q98	3Q98
Y/Y net income growth	10.7%	10.9%	10.1%	11.4%	12.0%
Y/Y EPS growth	2.7%	12.0%	10.4%	10.5%	11.2%

- Ameritech International Investments

Ameritech is now the largest foreign investor in European telecommunications, with financial interests in 15 countries

	1997	1Q98	2Q98
Value (\$B)	6.2	7.5	8.0

Note: all figures have been normalized to exclude one-time charges

Bell Atlantic

- Margins continue to increase despite access reform

	1996	1997	1Q98	2Q98	3Q98
EBITDA margin	41.2%	42.3%	44.1%	43.9%	44.1%
Operating margin	22.8%	24.1%	25.6%	25.6%	25.6%
Net income margin	11.9%	12.6%	13.7%	13.5%	13.8%

- Earnings continue to grow at double-digit rates

	1996¹	1997	1Q98	2Q98	3Q98
Y/Y net income growth	11.3%	10.7%	11.0%	11.0%	12.7%
Y/Y EPS growth	10.1%	10.5%	10.0%	9.7%	11.3%

1 - pro forma for Nynex

Note: All figures have been normalized, and exclude one-time charges

BellSouth

- Despite rate cuts, margins remain strong

	1996	1997	1Q98	2Q98	3Q98
EBITDA margin	44.6%	45.6%	46.0%	44.3%	43.9%
Operating margin	25.1%	26.4%	26.8%	25.3%	24.9%
Net income margin	13.2%	13.6%	14.7%	14.4%	13.9%

- Earnings continue to grow at double-digit rates

	1996	1997	1Q98	2Q98	3Q98
Y/Y net income growth	13.3%	11.7%	14.9%	16.7%	15.5%
Y/Y EPS growth	12.4%	12.3%	14.3%	15.5%	15.5%

Note: All figures have been normalized, and exclude one-time charges

SBC

- **Margins remain high despite access cuts**

	1996	1997	1Q98	2Q98	3Q98
EBITDA margin	42.6%	41.6%	43.0%	43.2%	43.4%
Operating margin	25.1%	24.3%	45.8%	25.9%	26.4%
Net income margin	13.7%	13.4%	14.2%	14.7%	14.6%

- **Earnings have been accelerating**

	1996	1997	1Q98	2Q98	3Q98
Y/Y net income growth	8.7%	6.8%	18.9%	19.6%	19.6%
Y/Y EPS growth	8.5%	5.4%	16.7%	18.2%	17.8%

1996 pro forma for Pac Bell

Note: All figures have been normalized, and exclude one-time charges

US West

- **Margins remain high**

	1996	1997	1Q98	2Q98	3Q98
EBITDA margin	44.3%	43.3%	44.1%	44.2%	43.6%
Operating margin	23.2%	23.1%	24.7%	26.6%	25.7%
Net income margin	11.5%	11.9%	12.8%	12.6%	12.2%

- **Earnings continue to grow**

	1996	1997	1Q98	2Q98	3Q98
Y/Y net income growth	5.1%	4.7%	5.8%	7.8%	4.1%
Y/Y EPS growth	3.8%	6.1%	6.8%	7.0%	4.2%

Appendix B
Affidavit
Of
Wayne Rehberger
Vice President
Network Financial Operations
MCI WorldCom, Inc.

AFFIDAVIT OF

I, Wayne Rehberger, Declare as follows:

1. I am Vice President of Network Financial Management. I am responsible for managing the ten million dollars MCI WorldCom spends annually on access charges and other line costs in order to pay for interconnection to the incumbent local telephone companies and their competitors. One of my chief duties is to minimize these costs while still maintaining MCI WorldCom's superior network.
2. Previously, I was MCI's Vice President of Corporate Planning, Analysis and Administration, a position in which I had responsibility over MCI's Corporate Financial Planning, Real Estate, Procurement and Facilities Planning. I have also held other positions at MCI including, Director of Corporate Planning, Senior Manager of Access Cost Management and Manager of Revenue Accounting and Reporting.
3. The purpose of my affidavit is to provide information describing the difficulties MCI WorldCom faces in its efforts to migrate substantial amounts of traffic from the incumbent LECs ("ILECS") to alternate access providers or to build its own facilities. Specifically, I will describe the pricing and network issues MCI WorldCom must grapple with when it seeks to lower its access costs by using an alternate access provider, and the obstacles imposed by the ILECS. I will also provide information regarding the costs involved in building local facilities, including collocation sites, and local transport networks.
4. MCI WorldCom searches for every possible opportunity to reduce the access charges we pay to the ILECS. Given the fact that well over 40 percent of our long distance revenues are used to pay for access interconnection to the ILECS, all opportunities to reduce costs through facilities-based alternatives (either those of a competitive access provider or our own) are closely evaluated and pursued. Unfortunately, other than through building our own facilities, or collocating at an ILEC central office and purchasing unbundled network elements (about which I will have more to say later), there are simply no alternatives to ILEC switched access charges, such as CCL, PICC, Local Switching, Residual TIC, and the End Office Port Charge. In fact, to the extent access competition exists at all, it is confined to the area of transport. MCI's access bills are reflective of the fact that there are few competitive access alternatives. During the first six months of 1998, an average of only 3 percent.⁸⁸ of MCI's total billed access charges, and far less than one percent of MCI's switched access minutes are with competitive access providers ("CAPs") or competitive local exchange carriers ("CLECs")..

⁸⁸ In fact, this percentage is reduced to 2.4 percent when billing with MFS and Brooks Fiber is not included in the total.

5. In the transport arena, there are three basic components which the ILECs provide via tariffed pricing:

- DS3 Entrance Facility Capacity
- DS3/DS1 Multiplexing
- DS1 and DS0 Transport To Customer Locations (which the industry calls "Tail Circuits")

6. MCI has been moderately successful in finding and implementing alternatives for DS3 Entrance Facilities, in the limited locations currently served by CAPs. Among the seven largest ILECs, our ability to replace entrance facilities with CAPs varies widely, but on average, about one-quarter of these facilities today utilize an alternate source of supply. While we expect to increase that percentage in 1999, our ability to do so is constrained by the single fact that other than the downtown areas of the largest cities, CAPs are not serving most areas.

7. At the same time, virtually 100 percent of our DS3/DS1 multiplexing is still with the ILEC, as are the vast majority of our tail DS1s. This is true despite a longstanding corporate policy of utilizing less expensive sources of access facilities whenever possible.

ORDERING AND PROVISIONING DS3 ENTRANCE FACILITIES

8. The facilities-based alternatives for ILEC DS3 Entrance Facilities include either MCI WorldCom building its own facilities to the ILEC serving wire center ("SWC") or intermediate hub location, or leasing the facility from a CAP that is collocated in that ILEC SWC or hub.

9. "Lease v. build v. taking no action decisions" are based on economic models which consider key cost components. In the case of leasing a DS3 Entrance Facility from a CAP, the calculated cost savings are measured against any new recurring charges, as well as any non-recurring charges ("NRCs"). If the payback period is reasonably close, (typically) to six months, MCI WorldCom is likely to proceed with the conversion to CAP facilities. When considering the option to actually build facilities to the ILEC SWC or hub, MCI WorldCom evaluates the required capital cost against the expected cost savings. The projects that have a favorable rate of return are good candidates for construction.

10. Of the twenty-five percent of competitively-provided DS3 entrance facilities we utilize, only about half were implemented by actually "rolling" them to ILEC facilities, the rest are new facilities. This is because the ILECs make it difficult for us to "roll" circuits. Since its the ILECS who trigger the actual movement of circuits that otherwise generate revenue for them, the pace of these projects and commencement of cost savings, are often delayed.

11. For example, MCI WorldCom had planned to roll six DS3s off a Bell Atlantic OC48 and onto the MCIMetro OC48 in White Plains, New York. The Access Service Request ("ASR") was sent to Bell Atlantic on September 11, 1998, with a planned rollover date of October 6, 1998. However, on October 1, 1998, five days prior to the rollover date, Bell Atlantic informed MCI WorldCom that it could not support the October 6, rollover date, because it did not send the

ASR to its downstream organization until September 28, 1998. MCI WorldCom now has to reschedule its rollover date until November 1998, ensuring that Bell Atlantic will retain the revenues for these DS3s for at least another month. Unfortunately, this type of behavior is not unusual for the ILECS, and leaves MCI WorldCom with little recourse.

12. The ILECS even make submitting an ASR to rollover one or more DS3 circuits as difficult as possible. They rely on a basic circuit management system called Trunks Integrated Record Keeping System ("TIRKS"). In the process of engineering and planning DS3-level circuit rolls, this system requires manual updates for all subtending DS1 and DS0 circuits, even though single DS3 reconfigurations are planned. Even since 1996 when MCI attempted significant volumes of DS3 rollovers, the ILECS have not upgraded TIRKS to accept DS3 ASRs. While MCI WorldCom has made the needed investments in its comparable circuit management systems, our project managers are still required by the ILECS to generate DS1 and DS0-level ASRs. This is a costly and time-consuming process for both MCI WorldCom and the ILEC, one which naturally limits the volume of DS3 rollovers in a given year, and maintains as much of the ILEC's revenues for as long as possible.

13. In the same vein, the ILECS do not require these DS1 and DS0 ASRs for their own internal conversions from older entrance facilities to their newer SONET transport. Nor do they require any ASRs when implementing fiber diversity projects. These projects have no more or less impact on the subtending DS1 and DS0 circuits than do the DS3 level rolls. Yet the ILECS continue to hinder DS3 roll projects through arbitrary administrative processes.

14. For those ILECs which still require DS1 and DS0 level ASRs, (which includes all of the ILECS other than Bell Atlantic), the IXC's are assessed non-recurring charges for each of these circuits, even though they are not being re-engineered or moved as their own entity. These non-recurring costs are often extremely high, and do not appear to be cost-based. The result is that we are often stopped from rolling circuits to a CAP because these high charges result in a payback period we cannot justify.

15. For example, Table 1 lists the non-recurring rollover charges for Pacific Bell.

TABLE 1 PACIFIC BELL NON-RECURRING ROLLOVER CHARGES

A. Per Point Of Termination With No Change In The Point Of Termination

	SWITCHED ACCESS		SPECIAL ACCESS	
	FIRST	ADDITIONAL	FIRST	ADDITIONAL
DS3	\$498	\$350	\$230	\$206
DS1	\$498	\$350	\$230	\$206
DS0	\$203	\$45		

B. Per Point Of Termination With A Change In The Point Of Termination

	SWITCHED ACCESS		SPECIAL ACCESS	
	FIRST	ADDITIONAL	FIRST	ADDITIONAL
DS3	\$696	\$438	\$427	\$321
DS1	\$696	\$438	\$427	\$321
DS0	\$429	\$183		

16. It is important to note that Pacific bills rollover non-recurring charges at the level at which the customer rolls the circuit. For example, if MCI WorldCom rolls a circuit at the DS3 level, a rollover per DS3 would be charged. No charge would apply to the subtending services (the DS1 circuits riding the DS3), as long as there is no change in the subtending services. However, if MCI WorldCom were to roll at the DS1 level (which we do for many of our projects), rollover DS1 charges would apply. In this particular case, if we were to rollover a circuit at the DS3 level with a change in the point of termination, we would be charged \$696. However, if we migrated 28 DS1s (which is equivalent to one DS3) with a change in the point of termination, we would be forced to pay \$12,522.

17. The situation is the same for the other ILECS. For example for switched access circuits, Ameritech will charge a non-recurring charge of \$960 for each DS1 that is rolled from its previous location to a collocation where a CAP is located. For a fully loaded DS3 (28 DS1s) this would total to a cost prohibitive \$26,880. For special access circuits, Ameritech will charge \$600 per DS3, plus \$400 for each DS1 that is multiplexed down to a DS0 level. In addition, Ameritech requires customers to provide an Access Service Request for all services riding the DS3. Each DS1 and DS0 riding the DS3 requires an ASR and MCI WorldCom is charged an "administrative" fee of \$50 per ASR. Similarly, US West charges \$297.41 for rolling over the first switched DS1 circuit riding a DS3 facility and \$10.43 for each additional DS1, while BellSouth charges \$85 for each DS1 circuit rolled to a CAP for a total of \$2,380 per DS3. All of these charges are excessive and vary so much from ILEC to ILEC that it is evident they are not cost-based. However, they all serve to limit the opportunities MCI WorldCom has to use competitors.

18. The use of TIRKS is also detrimental to achieving cost efficiency even for the one ILEC (Bell Atlantic) which accepts DS3- level ASRs. While MCI WorldCom is able to submit a single ASR to move a given DS3, Bell Atlantic still employs a staff to manually input the lower level circuit commands into TIRKS. The result is that the data records must be "frozen" for four weeks prior to a planned conversion data. Further, MCI WorldCom has experienced an average interval of two months after the conversion where Bell Atlantic's internal updates remain incomplete. The impact of this is very significant. MCI WorldCom must buy additional DS3 capacity to make up for that which cannot be used for up to 90 days due to the TIRKS limitations and ongoing manual processes. Again, this places a naturally engineered throttle on the pace of conversions in a given year.

19. Another limitation on MCI WorldCom's ability to move circuits results from the fact that the ILECS have priced their DS3 circuits to ensure that customers must sign up for term discount plans if they do not wish to pay egregiously high rates. ILECS tend to lock in their customers in

two ways, either through high non-recurring charges for signing month-to-month contracts, and/or through extremely high Maximum Termination Liabilities (“MTLs”).

20. An example of outrageously high non-recurring charges that lock in customers to long-term contracts occurs in California where Pacific Bell charges customers a non-recurring charge of \$31,000 for signing a month-to-month contract, but “only” \$3,000 for a one-year contract (as shown in Table 2). There cannot be a cost difference of \$28,000 for provisioning a DS3 circuit for one month as opposed to one year. Price schemes such as this effectively lock in customers such as MCI WorldCom to long-term contracts, and effectively limit the circuits we can move to CAPs to our new or “growth” circuits.

TABLE 2		PACIFIC BELL DS3 NON-RECURRING CHARGES		
CKT	ZONE	MONTH	1 YEAR	3 YEAR
		TO MONTH		
DS3 W/EQUIP	1	\$31,000	\$3,000	\$1,500
	2	\$31,000	\$3,250	\$1,625
	3	\$31,000	\$3,500	\$1,750
DS3 WO/EQUIP	1	\$21,150	\$2,000	\$1,000
	2	\$21,150	\$2,250	\$1,125
	3	\$21,150	\$2,500	\$1,250
DS3X3 W/EQUIP	1	\$56,200	\$5,500	\$2,750
	2	\$56,200	\$6,000	\$3,000
	3	\$56,200	\$6,500	\$3,250
DS3X3 WO/EQUIP	1	\$43,200	\$4,000	\$2,000
	2	\$43,200	\$4,500	\$2,250
	3	\$43,200	\$5,000	\$2,500

21. Excessive Maximum Termination Liabilities also restrict MCI WorldCom’s competitive opportunities. For example, if MCI WorldCom were to purchase a five-year contract from Bell Atlantic-South for 10 DS3 circuits, our monthly charge would be \$2,000 per circuit or a total of \$20,000. If eight months into the contract, we are offered a lower price by a competitor, and wish to rollover our circuits, we would have to pay a termination liability to Bell Atlantic of \$236,000.⁸⁹ Even if the CAP or CLEC competitor offered a monthly discount of 20 percent a

⁸⁹ \$236,000 is calculated from Section 6.8.22(C) of Bell Atlantic’s access tariff (FCC No. 1) as follows. The monthly cost of ten DS3s at \$2,000 per circuit is \$20,000. Bell Atlantic’s termination liability would require payment of 100 percent of the monthly charge for the difference between the time we were on the contract (8 months) and one year. Thus we would pay 4 months x \$20,000 = \$80,000. In addition, we must pay 15 percent of the monthly cost for the time difference between the length of the contract (60 months) and the number of months we

month below our Bell Atlantic monthly price (\$4,000), the amount we would save in the first year ($\$4,000 \times 12 = \$48,000$) is overwhelmed by \$236,000 added to our bottom line.

22. This ILEC pricing scheme has been very successful in locking in MCI WorldCom to long-term contracts. The vast majority of MCI's DS3 circuits are on long-term contracts, lowering our access expenses, but lessening our competitive alternatives. For example, even in Chicago the second largest city in the country, where one would expect CAP competition to be robust, if it is succeeding anywhere, MCI still pays the ILEC approximately 90 percent of its transport costs

23. It is not all clear that this situation will change as contracts expire. If CLECs haven't expanded facilities for transport to provide geographic matches of ILEC transport facilities, we expect to have to continue our reliance on ILEC facilities despite our extreme reluctance to do so.

DE3/DS1 Multiplexing

24. Even when MCI WorldCom converts Entrance Facility DS3s to built or leased alternatives, we still continue to purchase DS3/DS1 multiplexing from the ILECS. This is done for two reasons:

- Conversion to alternative multiplexing involves actual circuit rolls at the DS1 and DS0 levels. This enables the ILEC to assess non-recurring charges that are approximately three times that of the non-recurring charges assessed with DS3 rollovers.
- The resultant DS1 connectivity, particularly for those DS3s and multiplexing provided by CAPs or CLECS becomes operationally complex as a third party is required to participate in circuit activation and maintenance.

25. There are few alternatives to leasing ILEC DS3/DS1 multiplexing. If we were to install multiplexing equipment and associated cross connect frames in collocation cages, it would consume large amounts of floor space and simply would not be practical under existing ILEC collocation space restrictions.

26. The continued use of ILEC multiplexing preserves a significant amount of revenues for the ILECS. The average tariffed non-discounted monthly cost of a DS3/DS1 multiplexer is approximately \$1000 per month. While some ILECS have modernized to DS3/DS1 multiplex units, many of MCI WorldCom's access DS3 circuits still terminate onto older obsolete M13 units, which have a retail average price of \$6,000. In six months, the ILEC has recovered the entire purchase price of the M13. Other than some maintenance and repair expenses, which are small, the rest is pure profit. This level of recurring charges can only be maintained in an environment in which the dominant ILEC provider does not fear competition. Even if this

were on the contract (8 months). Thus we must pay 15 percent of \$20,000, or \$3,000 for 52 months, which is equal to \$156,000. Therefore, the total termination liability is $\$80,000 + \$156,000 = \$236,000$.

charge were to be discounted 30 to 40 percent by signing up for a term plan, the resulting rate is still far in excess of the likely depreciation or operating expenses for these units.

DS1 Tail Circuits

27. By definition, "Tail Circuits" are the portion of dedicated transport from the multiplexing location discussed above to the customer's actual premise. This usually involves interoffice transport within the ILEC network and constitutes the single largest cost element of the aggregated costs paid to the ILEC for transport service.

28. As with DS3 entrance facilities, MCI WorldCom has few alternatives to replacing the cost of tail circuits. We can either build transport systems to the customer's premises or lease these facilities from CAPs or CLECs. However, because of the costs involved, this is not, for the foreseeable future, a reasonable solution.. Other CAPs and CLECS face the same financial barriers to providing facilities as MCI WorldCom, thus it should not be surprising that they have been able to afford to build in limited areas.

29. Competitive choice for switched transport DS1s is even less in evidence than for special access. MCI WorldCom must use direct-trunked transport whenever possible since ILEC tandem-switched transport is priced so high, and there are almost no existing competitive alternatives. Once we make the decision to use direct-trunked transport, we are again confronted with the "lease-or-buy" decision, and are almost always "forced" into long-term contracts.

30. Even when MCI WorldCom can utilize a competitive tail DS1 alternative, we are sometimes constrained by a subset of customers who insist on MCI WorldCom using the ILEC for access transport. While this attitude may seem unreasonable to the FCC, it is a fact those of us who deal with the network have become accustomed to facing. It exists primarily because customers have had ILEC service for so long, they are reticent to change for fear of lost reliability or because they simply don't trust or have had a bad experience with the CAPs. While this is changing slowly it further limits the immediate opportunity for MCI WorldCom to reduce its access costs and hurts new entrants into the market.

31. The only other alternative that exists to reduce tail circuit transport costs is end office collocation for the purpose buying of buying unbundled network elements, such as unbundled DS1s or DS0 loops. And while MCI WorldCom does utilize unbundled loops when possible, we have found them overpriced in many states and in general, supported by inferior ILEC operating support systems.

COLLOCATION

32. The initial costs paid to the ILECS for unbundled collocation cages are excessive and often prohibitive. In New York City, the charges MCI WorldCom has paid to Bell Atlantic-North have averaged out to \$102,000 per collocated cage. With this average payment, MCI WorldCom receives a 400 square foot fenced area, a door, lights and a power feed. With charges like these, collocation is restricted to the end offices generating the highest levels of traffic.

33. That it is expensive for MCI WorldCom to collocate at An ILEC end office is shown by Table 3. This table lists MCI's actual capital appropriation request for a collocation with Ameritech in one Ameritech-region central office.

Table 3	MCI SAMPLE CENTRAL OFFICE COLLOCATION TOTAL COSTS	
COST	DESCRIPTION	AMOUNT
Inside Plant	Electronics and Labor at both the Ameritech and MCI Locations	\$299,480
Outside Plant	Construction, Splicing, Testing	\$193,065
Collocation	Recurring and Non-Recurring charges such as floor space, power, cross-connect, cable installation.	
	Year 1	\$48,164
	Year 2 and Beyond	\$28,164
Operating	Right-Of-Way	\$2,096
Termination Liability	31 DS3s	\$139,505
Circuit Rearrangement	Non-Recurring Charge	\$13,237
TOTAL COSTS		
YEAR 1		\$695,548
YEAR 2 AND SUCCESSIVE YEARS		\$30,260

34. Many end offices simply do not have space for physical collocations. In lieu of available space, the ILECS offer only virtual collocation, which essentially prohibits MCI WorldCom from actually gaining access to the site, but still burdens us with all diagnostic, operational and asset management decisions. It is comparable to operating a physical collocation while wearing a blindfold. I strongly agree with the recent comments regarding physical and virtual collocation recently filed by TCG in Massachusetts:

Physical collocation is the more efficient and desirable approach to interconnection for competitors. Under the physical collocation model, a CLEC can own, install and maintain its own equipment without interference from the ILEC. Most importantly, a CLEC is able to have much greater control over the quality of service it provides...In contrast, alternative approaches, including virtual collocation and mid-span meet arrangements, impose additional burdens on interconnectors. For example, virtual collocation arrangements often raise significant equipment ownership issues - most ILECS including Bell Atlantic

require that the competing carrier turn over ownership of the collocated equipment to the ILEC for the nominal sum of \$1.00. Under such an arrangement, a CLEC is unable to install its equipment or to access the equipment for provisioning, augmentation or maintenance. Further, once the CLEC has turned over control of the "virtually collocated" equipment, the parties must develop elaborate, and often unsatisfactory, procedures for ILEC-controlled use of the equipment by the interconnector. Virtual collocation essentially prevents a CLEC from providing as high a quality of service as that provided by the incumbent. It also prevents a CLEC from rapidly introducing new technology into their networks. The introduction of each new type, or even brand, of equipment requires the CLEC to train ILEC personnel in its use. This is not only a slow and costly process, but eliminates much of the incentive that CLECS have to innovate. The inefficiency and inconvenience are compounded by the fact that the ILEC charges the interconnector for these "services." The end result is that a CLEC's competitive advantage gained by acting quickly to incorporate new technologies is effectively canceled.⁹⁰

35. In addition to the cost and space constraints, collocation is also delayed by the long intervals the ILEC allow themselves to prepare a collocation cage, and the ordering restrictions they mandate. For example, Bell Atlantic, US West, BellSouth and Pacific have construction intervals of 76, 90, 120 and 120 calendar days respectively, and this does not include days spent on the application and acceptance process each ILEC requires. In addition, order restrictions, such as the fact that BellSouth will only respond to up to three applications for space within the same state submitted within a fifteen day business day interval, further delay collocations.⁹¹

36. Thus, it should not be surprising that there are relatively few end offices in which collocation sites have been established. For example in the state of Illinois, CAPs and CLECS have collocated in only 19 of the 1,052 end offices, equating to a paltry 1.8 percent. Clearly, it will take years before competitors will be able to collocate at a meaningful number of the more than 23,000 ILEC central office nationwide.

BUILDING FACILITIES

37. Of course as the ILECs are quick to remind regulators, MCI WorldCom and other CLECS are free to build our own local facilities, become a CLEC, and thereby avoid the ILEC access networks completely. What the ILECS conveniently fail to recognize is the great expense and the time involved in actual planning for and building facilities. For example, listed below is a series of steps any new entrant into the local market must follow in order to provide local service:

⁹⁰ Before the Massachusetts Department of Telecommunications and Energy, In the Matter of Petition of Teleport Communications Group Inc. To Establish Collocation Procedures, D.T.E. 95-58, Petition of Teleport Communications Group Inc. To Establish Collocation Procedures, filed on May 14, 1998, at pp. 2-3 (footnotes omitted).

⁹¹ BellSouth Master Collocation Agreement 4.1.1.

- Acquire necessary capital
- Plan and design local city networks
- Obtain right-of-ways
- Identify end offices for collocations
- Construct;

Fiber rings
Access nodes
Switch Room

- Build out facilities based on Equipment Placement Agreements with building owners
- Install and test equipment
- Develop internal systems necessary to provide service
- Build internal interim and permanent automated systems interfaces to ILEC and industry specifications
- Undertake customer acquisition

38. MCI WorldCom's ability to provide local service is also dependent on regulator, ILEC and vendor actions. For example, in every city we plan to enter, we must negotiate franchise and right-of-way agreements, obtain construction permits and provide enhanced 911 ("E911") service. We must also receive local certification from the state public utility commission, file state tariffs, and participate in cost and other proceedings.

39. We are also forced to negotiate interconnection agreements with the ILECS who have shown conclusively that they will do everything in their power to delay our entry and have repeatedly offered us interconnection terms and conditions that would provide themselves with a clear competitive advantage.

40. After we finally achieve an interconnection agreement (usually through arbitration), we must plan, establish and test interconnection, E911, operator services, directory assistance and directory listings with each ILEC. In addition, we must apply and obtain NXXs from the ILEC number administrator, and load each NXX number into the ILECS' and our own routing schemes.

41. We must also deal with our vendors. We must negotiate equipment placement agreements, and leases for switch placement, purchase switch and transport equipment, and negotiate, establish and test access interconnection with IXCs. All in all, the process for becoming a facilities-based competitive local provider is capital and resource intensive and takes considerable time. It is not, as the ILECS would like the world to believe, a simple and overnight procedure.

42. The cost involved in building a competitive local network cannot be understated, even for a company with the resources of MCI WorldCom. For example, planning and engineering the routes for local network's in each metropolitan area takes millions of dollars

43. Construction costs to actually build, engineer and test facilities are equally expensive. In fact, MCI WorldCom has estimated that the costs of serving only 18 percent of the nationwide business market on its own facilities would cost \$21 billion. And, while some may dispute this amount, there can be no dispute that it will take years to achieve wide-spread facilities- based local competition.

44. In sum, as I attempt to succeed in my job of reducing MCI WorldCom's access costs, my options are few. My first choice is always to build our own facilities, but I am constrained by a finite budget. When, I therefore turn to my second choice - the use of competitive alternatives - I am confronted on the one hand with their limited availability, and on the other hand by ILEC prices, terms, conditions and policies that restrict the use of alternatives even when available. In my experience, competitive sources of supply are simply not available to the largest IXCs.

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on October 21, 1998.

A handwritten signature in cursive script, reading "Wayne Rehberger", followed by a circled "RD".

Wayne Rehberger

Appendix C

Analysis of Rate of Return For Local Exchange Telephone Companies

**Matthew I. Kahal
Exeter Associates, Inc.**

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION**

**RATE OF RETURN
FOR LOCAL EXCHANGE
TELEPHONE COMPANIES**

Prepared for:

MCI Worldcom Inc.

Prepared by:

Matthew I. Kahal

October 1998

EXETER

Associates, Inc.

12510 Prosperity Drive
Suite 350
Silver Spring, MD 20904

RATE OF RETURN FOR LOCAL EXCHANGE TELEPHONE COMPANIES

A. OVERVIEW

The FCC established the currently authorized rate of return on investment, 11.25 percent, in a 1990 rulemaking proceeding (CC Docket No. 89-624). The 11.25 percent return on investment incorporates a return on the common equity component of about 13.2 percent and uses the balance sheet consolidated capital structures of the Bell Regional Holding Companies. The 13.25 percent was developed using an application of the standard Discount Cash Flow (DCF) analysis along with several ad hoc “adders” or adjustments. These adders increase the authorized return on equity over the cost of equity by approximately a percentage point.

Market capital costs have moderated considerably since 1990, and as a result, the FCC believes it is time to revisit its earlier finding on rate of return for interstate access service. Consequently, this report presents an updated cost of capital study including a DCF cost of equity study. As was the case in the FCC’s 1990 proceeding, the standard DCF model is applied to the Regional Bell companies using 1998 market data.¹ Using this approach, we obtain a cost of equity of 11.4 percent and a recommended return on rate base of 9.1 percent. If the FCC’s “adders” are included, the return on investment increases to 9.6 percent. However, as explained

¹At the time of the last FCC rate of return proceeding in 1990, there were seven Regional companies. As the result of merger activity, there are now five such companies.

in this report, those adders are no longer appropriate and should not be included in a final determination of rate of return for interstate access.

In our judgment, the DCF model remains the best single method for determining the cost of common equity capital for the local exchange telephone industry. Nonetheless, all methods have limitations and shortcomings, particularly when market conditions are volatile as they have been in recent months. For this reason, this report presents additional evidence in the form of a Capital Asset Pricing Model (CAPM) as a check on the DCF estimate. The CAPM results vary widely depending on the inputs and assumptions, but support a range from 10.2 to 11.6 percent. This provides a verification of the reasonableness of our DCF estimate.

The principal findings of this study are summarized as follows:

- (1) Using the FCC's basic approach to rate of return established in CC Docket 89-624, the overall rate declines from 11.25 percent to 9.6 percent.
- (2) The FCC's 11.25 percent reflects some ad hoc adjustments to the equity cost rate which are not appropriate at this time. Excluding those adjustments, the overall rate of return becomes 9.14 percent.
- (3) Using market data for the six months ending August 1998, the DCF cost of equity is 11.4 percent. This estimate is verified by CAPM evidence.

- (4) The average capital structure for the present five Bell holding companies is 46.8 percent common equity and 53.2 percent total debt as of year-end 1997.
- (5) The embedded cost of debt for the Bell local exchange companies is 7.1 percent for 1997.
- (6) As measured by yields on long-term utility bonds, the cost of capital has fallen significantly since 1990, by nearly three full percentage points. While the cost of equity has also fallen since 1990, that reduction is much less.
- (7) Present evidence would support a reduction in overall rate of return from 11.25 to 9.14 percent.

B. GENERAL CAPITAL COST TRENDS

As background to an update of rate of return, it is useful to examine trends in capital costs since 1990, the time of previous FCC investigation of rate of return. Table 1 presents information on several capital market indicators (i.e., inflation rate, ten-year Treasury notes, three-month Treasury Bills and Aa-rated utility bonds) for the time period January 1990 to September 1998.

As this table shows, there has been a clear downward trend in capital costs since 1990. In 1990 and 1991, the inflation rate was 4 to 5 percent, and double A utility bond yields were in the

9 to 10 percent range. Since 1992, capital costs have trended steadily downward with the exception of 1994 through early 1995. Between mid-1995 and mid-1997 capital costs fluctuated, with inflation averaging about 3 percent, and Aa utility bonds generally yielding about 7.5 to 8.0 percent.

Since mid-1997, there has been a further downward trending in capital costs. A number of factors account for this trend, but above all the reduction appears to be closely linked to the slowing of inflation. Prior to early 1997, inflation had been averaging about 3 percent. During the latter part of 1997 and through 1998, it has slowed to about 1.5 to 2.5 percent. As a result, double A utility bond yields have fallen below 7 percent and long-term Treasury bonds are now yielding about 5 percent.

Table 2 provides a comparison of published utility bond yields during 1990 with 1998, using the latest available data. During January through July 1990, Aa utility bond yields averaged 9.63 percent. For the most recent seven months (March - September 1998), bond yields average 6.92 percent. This is a dramatic reduction of nearly three full percentage points. While the cost of equity for telephone companies need not fall by the same magnitude, it is quite clear that a substantial decline in the cost of capital has occurred.

C. UPDATED DCF ANALYSIS

In CC Docket 89-624, the FCC selected the "classic" discounted cash flow (DCF) model as its analytical tool to estimate the cost of equity. This is the standard model which has been

used by most state utility regulatory commissions to estimate the cost of equity for telephone companies, as well as for electric, gas and water utilities. The formula utilized is:

$$K_e = D_o/P_o (1 + 0.5 g) + g, \text{ where:}$$

K_e = cost of equity

D_o = current annualized dividend (i.e., quarterly dividend multiplied by four)

P_o = stock price

g = long run rate of growth of dividends per share

The Commission applied this model to the seven Regional Bell Operating Companies (RBOCs) as a group, recognizing that they provide the best available proxy for the local exchange telephone companies. To obtain its finding, the Commission used published stock price and dividend data for the first seven months of 1990.

The Commission obtained the dividend growth factor -- probably the most controversial component of the DCF formula -- from Institutional Brokers Estimate System (IBES). IBES is an investor service which conducts a survey of institutional analysts and compiles their earnings growth rate projections, both near and long term. The Commission used the average five-year growth rates published by IBES for each of the seven RBOCs.

Using this approach, the Commission obtained a DCF estimate of 12.19 percent averaged over the seven months ending July 1990. The FCC, however, did not adopt the 12.2 percent as

the authorized return on equity. Instead, it treated the 12.2 percent as a starting point and added several adjustments to that result, thereby increasing this value to approximately 13.2 percent.

This study updates the cost of equity by applying the “classic” DCF formula to the RBOCs. However, due to intervening merger activity, the original seven RBOCs are now a group of five companies. The study begins by compiling stock price and dividend data to calculate dividend yields. This is shown on Table 3 for each month and company for the six months ending August 1998. Over this period and for this group, the dividend yield averages 2.9 percent.

The individual calculations are performed by first calculating the annualized dividend (i.e., the indicated quarterly dividend multiplied by four). The stock price in a given month is the average of the high and low for the month reported in Standard & Poor’s Stock Guide. The yield is computed as the annualized current dividend divided by the average stock price for the month.

The growth rate factor is derived from the same source as that used by the FCC -- the IBES survey. Table 4 shows the latest long term projections of earnings per share growth published by IBES along with the most recent Value Line projections of earnings and dividends. As Table 4 indicates, the IBES growth rates average 8.4 percent for this group.

Employing the classic DCF model, the cost of equity for the RBOC group becomes:

$$K_e = 2.90\% (1 + 0.5(8.4)) + 8.4\%$$

$$= 11.4\%$$

The cost of equity as of mid 1998 for the RBOC group is 11.4 percent. This figure should be utilized as the common equity return in setting the overall rate of return for interstate access service.

The FCC Adders

As mentioned earlier, the FCC includes several ad hoc adjustments which collectively add about 1.0 percentage point to the cost of equity. If included, these adders would increase the current DCF-derived cost of equity from 11.4 to 12.4 percent.

The FCC's first adjustment recognized that there is variation in the DCF results among the seven RBOCs around the 12.2 percent DCF average. Thus, to ensure that the generic cost of equity finding did not fall below any RBOC's individual cost of equity, the Commission identified a range of 12.6 to 13.0 percent. This is equivalent to an adder of 0.4 to 0.8 percent (i.e., a midpoint of 0.6 percent).

The second adjustment pertains to the highly controversial "cellular effect" argument. According to this argument, RBOC stock prices (and therefore dividend yields) reflect the value of cellular telephone assets acquired by the RBOC. However, it is argued that the IBES growth rates do not incorporate cellular earnings because the cellular earnings are almost entirely beyond the five-year time horizon. In the extreme form, the "cellular effect" argues that standard

application of the DCF model to the RBOCs is completely invalid. While the Commission substantially discounted the cellular argument, it included an adjustment to recognize the “possibility” of earnings growth understatement. At the same time, the FCC recognized that interstate access service is somewhat less risky than non-regulated RBOC operations and therefore a downward adjustment was needed. In combination, these two considerations (which move in offsetting directions) increased the FCC’s return on equity range by 0.2 percent.

The final adjustment was unrelated to cost of equity estimation but is merely an adder to promote “infrastructure” development. This increases the midpoint of the range from 13.0 to 13.2 percent.

In summary, the return on equity adders are:

(1)	Variation DCF results	+ 0.6%
(2)	Cellular effect/RBOC risk (net)	+ 0.2
(3)	Infrastructure incentive	+ <u>0.2</u>
	Total Adjustment	+ 1.0%

The three FCC adjustments are not needed and their inclusion only serves to raise the cost of interstate access service. The first adjustment recognizes that the “classic” DCF method produces differing results for the seven RBOCs. This could be due either to differing costs of equity among the companies, or more likely, simply the fact that there is some degree of randomness (i.e., “noise”) in stock price and IBES survey data. Using a group of seven

companies (or five today) is useful in that it helps to cancel out the random high/low data fluctuations. Consequently, the overall average DCF result is the appropriate measure and an adder reflecting intercompany differences is superfluous. With the adder for variation, consumers on average will pay for an excessive cost of equity embedded in rates, and the LECs will be over compensated.

The cellular argument received only limited weight in 1990 and should receive even less today. While cellular telephone was clearly an infant industry in 1990, it has progressed substantially and become much more firmly entrenched over the last eight years. The argument in the 1990 case was that the IBES five-year earnings forecasts, extending at that time only to 1994/1995, did not fully recognize cellular earnings expectations. That argument is no longer relevant today with cellular profits now becoming evident. It is highly unreasonable to argue that the RBOC analysts at the present time (in late 1998) are overlooking the cellular profit potential given that the IBES earnings projections extend out to the year 2003. In other words, it is not realistic to argue that financial analysts are presently excluding the potential for cellular-related profits in their long range earnings forecasts.

Finally, the infrastructure incentive adjustment is neither necessary nor appropriate. Under this Commission's price cap plan, the LECs have already demonstrated their ability to earn well in excess of the 13.2 percent midpoint return on equity, as previously noted by this Commission. Given the fact that they may retain some or all of surplus earnings, the LECs

already possess substantial capital investment and modernization investment incentives. The Commission's 0.2 percent adder is not needed and is unrelated to the cost of equity.

D. CAPM COST OF EQUITY ANALYSIS

Given the recent volatility in financial markets, it is useful at this point to consider corroborative evidence on cost of equity. Part of the corroborative evidence is simply the decline in long-term interest rates and inflation since 1990, as shown on Table 1.² In addition, a cost of capital study is performed using the Capital Asset Pricing Model (CAPM). This model hypothesizes that the cost of equity for a given company is the return on a "risk free asset" plus an equity premium reflecting the investment risk specific to that company. This premium reflects the risk increment which cannot be eliminated through investment diversification.

The standard CAPM formula is as follows:

$$K_e = R_f + b (R_m - R_f), \text{ where:}$$

K_e = the firm's cost of equity

R_f = the risk free asset return

R_m = the rate of return on the overall stock market

b = the "beta" statistic for the company in question

²The counterargument is that the RBOC's have become riskier since 1990, and the increased telecom risk offsets the general decline in inflation and interest rates. Information on Tables 5 and 6 refute that view.

Beta measures a common stock's price or market return volatility relative to that of the overall stock market.

While the theory is well understood, there are a number of key difficulties in applying the model and selecting the key inputs. First, the model requires an identification of the overall stock market rate of return. Some analysts address this by conducting a stock market expected return analysis, for example, using the DCF model. Another approach is to use the historical after-the-fact market returns, such as those published in the Ibbotson Yearbook.³ This approach assumes that historical returns influence investor expectations of future returns.

The second area of controversy is the risk-free rate. Some practitioners argue for the use of long-term Treasury bond yields on the grounds that the cost of equity is a long-term concept. Others note that long-term Treasury bonds are not risk free, but are subject to considerable interest rate or market risk. Consequently, they argue that the only true risk free asset is the short-term Treasury bill.

Third, there is controversy over the "beta" and how it should be quantified. Some analysts are concerned about the reliability of beta as a prospective risk measure because it is estimated from historical data. Also, measured betas can be volatile.

³The Ibbotson Associates 1998 Yearbook provides historical market returns computed in different ways over the time period 1926-1997.

Given these controversies, we have applied the CAPM methodology using a wide range of inputs to incorporate different perspectives. To address the problems with beta, one of which is the instability of single company betas, we utilize the average of the RBOC group. To obtain a range, two sources of published betas are used, the Value Line Investment Survey (July 10, 1998) and Standard & Poor's Stock Reports (August 1998). The reported betas are as follows:

Published Betas for the RBOCs		
	<u>Value Line</u>	<u>Standard & Poor's</u>
Ameritech	0.95	0.80
Bell Atlantic	0.95	0.74
BellSouth	1.00	0.69
SBC	0.90	0.68
U S West	<u>0.70</u>	<u>0.31</u>
Average	0.90	0.64 ⁴

Given the recent flattening of the yield curve, the selection of the risk free rate has diminished in importance as an issue. For purposes of this study, we use a range of 4.5 percent for short-term Treasury bills and 5.0 percent for long-term Treasury bonds. These yields approximate those prevailing in credit markets as of the preparation of this report in early October 1998.

⁴Since the unusually low figure for US West may distort the average, the S&P average of 0.64 is rounded up to 0.70.

The most difficult issue is the overall stock market rate of return. Ibbotson's 1998 Yearbook identifies historic (1926-1997) average annual stock market returns of 11.0 percent (geometric) and 13.0 percent (arithmetic). Ibbotson recommends the use of the latter for CAPM applications. It should also be noted that over this historical time period the inflation rate averaged 3.2 percent, somewhat above current and expected levels. Other return data which we have examined would tend to support similar or slightly lower returns.⁵ For CAPM purposes, we are employing a rather wide stock market return range of 11 to 14 percent. There appears to be little support, however, for the 14 percent upper end.

These various inputs are combined on Table 9 which presents the CAPM calculations. The first page employs the Value Line RBOC beta of 0.9 and obtains a cost of equity range of 10.4 to 13.1 percent. The second page of Table 9, which employs the Standard & Poor's beta, obtains a range of 9.1 to 11.3 percent, with an average of 10.2 percent. Focusing on these averages, the CAPM approach provides a cost of equity range of 10.2 to 11.6 percent, which is generally consistent with the DCF estimate of 11.4 percent.

E. DETERMINATION OF THE OVERALL RATE OF RETURN

In addition to the cost of equity, the calculation of the overall return requires identifying the capital structure and the embedded cost of debt. In CC Docket No. 89-624, the Commission employed the actual consolidated capital structures of the seven RBOCs and the debt costs of the

⁵For example, the projections associated with Value Line's "Industrial Composite" support a stock market return of roughly 11 to 12.5 percent.

Bell operating companies. For purposes of developing the recommended rate of return, the same general method is followed in this report.

In the 1990 proceeding, the FCC was concerned about the problem of "financial manipulation," that is, an RBOC has the ability to move debt leverage from the balance sheet of an operating telephone company to that of the holding company or to that of its nonregulated subsidiaries. Such a practice would thicken the telephone company's equity ratio, and since equity is more expensive than debt, increase the allowed overall rate of return. The use of the RBOC capital structure would prevent that unwarranted increase in rate of return and thereby protect consumers. In the 1990 proceeding, the FCC found that the RBOC capital structures averaged 55.8 percent equity and 44.2 percent debt.

Table 8 presents the consolidated capital structures of the five RBOCs at December 31, 1997, the most recent year-end data available. These capitalization balances average to 46.8 percent equity and 53.2 percent debt.⁶ This is an average reduction in the equity ratios for these companies of about 9 percentage points as compared to capital structures in 1989.

Table 7 presents a calculation of the embedded cost of debt based on 1997 data derived from the ARMIS reports of the Bell operating companies. As shown on Table 7, the average

⁶Balance sheet data indicate a very small amount of preferred stock, 0.1 percent. For convenience, this is included as part of common equity in the recommended capital structure.

embedded cost of debt in 1997 was 7.14 percent. This compares to the Commission's finding of 8.8 percent in CC Docket No. 89-624, which was based upon 1989 data.

The calculation of the overall rate of return is shown on Table 10 using the 7.14 percent embedded cost of debt, the 12/31/97 RBOC capital structure and the cost of equity estimate of 11.4 percent. Combining these data produces a 9.14 percent overall return, which is our recommended rate of return for access service.

The middle portion of the table shows the overall rate of return assuming a return on equity of 12.4 percent. That equity return is the 11.4 percent DCF result including the 100 basis points for the Commission adders for cost of equity variation, cellular earnings and infrastructure incentive. This results in a 9.60 percent overall return. As stated previously, those adders are no longer needed or appropriate.

The bottom panel of the table shows a calculation of rate of return substituting the local exchange company capital structure (56 percent equity, 44 percent debt) in place of the RBOC capital structure. This is shown for comparative purposes because the LECs have argued in the past that the RBOC consolidated capital structure should not be used. This results in a rate of return of 9.52 percent.

TABLES ACCOMPANYING REPORT

Table 1

Recent Trends in Capital Costs

<u>1990</u>	<u>Annualized Inflation Rate</u>	<u>10-Year Treasury Yields</u>	<u>3-Month Treasury Bill</u>	<u>Double A Utility Yields</u>
January	5.2%	8.2%	7.6%	9.4%
February	5.3	8.5	7.8	9.6
March	5.2	8.6	7.9	9.6
April	4.7	8.8	7.8	9.8
May	4.4	8.8	7.8	9.8
June	4.7	8.5	7.7	9.6
July	4.8	8.5	7.7	9.6
August	5.6	8.8	7.4	9.8
September	6.2	8.9	7.4	9.9
October	6.3	8.7	7.2	9.8
November	6.3	8.4	7.1	9.6
December	6.1	8.1	6.8	9.4
<u>1991</u>				
January	5.7	8.1	6.3	9.4
February	5.3	7.9	6.0	9.2
March	4.9	8.1	5.9	9.2
April	4.9	8.0	5.7	9.1
May	5.0	8.1	5.5	9.2
June	4.7	8.3	5.6	9.3
July	4.4	8.3	5.6	9.3
August	3.8	7.9	5.4	9.1
September	3.4	7.7	5.3	9.0
October	2.9	7.5	5.0	8.9
November	3.0	7.4	4.6	8.9
December	3.1	7.1	4.1	8.7

Table 1
(continued)

Recent Trends in Capital Costs

<u>1992</u>	<u>Annualized Inflation Rate</u>	<u>10-Year Treasury Yields</u>	<u>3-Month Treasury Bill</u>	<u>Double A Utility Yields</u>
January	2.6	7.0	3.8	8.6%
February	2.8	7.4	3.8	8.9
March	3.2	7.5	4.1	8.8
April	3.2	7.5	3.9	8.8
May	3.0	7.4	3.8	8.7
June	3.1	7.3	3.8	8.6
July	3.2	6.8	3.4	8.5
August	3.1	6.5	3.2	8.3
September	3.0	6.4	3.0	8.3
October	3.2	6.6	2.9	8.4
November	3.0	6.9	3.1	8.5
December	2.9	6.8	3.3	8.3
<u>1993</u>				
January	3.3	6.6	3.1	8.1
February	3.2	6.3	3.0	7.9
March	3.1	6.0	3.0	7.8
April	3.2	6.0	2.9	7.6
May	3.2	6.0	3.0	7.6
June	3.0	6.0	3.1	7.5
July	2.8	5.8	3.1	7.4
August	2.8	5.7	3.1	7.1
September	2.7	5.4	3.0	6.9
October	2.8	5.3	3.0	6.9
November	2.7	5.7	3.1	7.2
December	2.7	5.8	3.1	7.2

Table 1
(continued)

Recent Trends in Capital Costs

	Annualized Inflation Rate	10-Year Treasury Yields	3-Month Treasury Bill	Double A Utility Yields
<u>1994</u>				
January	2.5%	5.8	3.0	7.2%
February	2.5	6.0	3.2	7.3
March	2.6	6.5	3.6	7.7
April	2.4	7.0	3.8	8.1
May	2.4	7.2	4.3	8.2
June	2.6	7.1	4.3	8.2
July	2.6	7.3	4.4	8.4
August	2.9	7.2	4.5	8.3
September	3.0	7.5	4.8	8.6
October	2.6	7.7	5.0	8.8
November	2.7	7.9	5.4	8.9
December	2.7	7.8	5.8	8.7
<u>1995</u>				
January	2.8	7.8	5.7	8.7
February	2.9	7.5	5.8	8.5
March	2.9	7.2	5.7	8.3
April	3.1	7.1	5.6	8.2
May	3.2	6.6	5.6	7.8
June	3.0	6.2	5.5	7.5
July	2.9	6.3	5.4	7.6
August	2.6	6.5	5.4	7.7
September	2.5	6.2	5.3	7.5
October	2.8	6.0	5.3	7.3
November	2.6	5.9	5.4	7.2
December	2.5	5.7	5.1	7.0

Table 1
(continued)

Recent Trends in Capital Costs

<u>1996</u>	<u>Annualized Inflation Rate</u>	<u>10-Year Treasury Yields</u>	<u>3-Month Treasury Bill</u>	<u>Double A Utility Yield</u>
January	2.7%	5.7%	5.0%	7.0%
February	2.7	5.8	4.9	7.2
March	2.8	6.3	5.0	7.6
April	2.9	6.5	5.0	7.7
May	2.9	6.7	5.0	7.8
June	2.8	6.9	5.1	7.9
July	3.0	6.9	5.2	7.8
August	2.9	6.6	5.1	7.7
September	3.0	6.8	5.2	7.8
October	3.0	6.5	5.0	7.6
November	3.3	6.2	5.0	7.3
December	3.3	6.3	4.9	7.4
<u>1997</u>				
January	3.0%	6.6%	5.1%	7.7%
February	3.0	6.4	5.0	7.6
March	2.8	6.7	5.1	7.8
April	2.5	6.9	5.2	8.0
May	2.2	6.7	5.1	7.9
June	2.3	6.5	4.9	7.7
July	2.2	6.2	5.1	7.4
August	2.2	6.3	5.1	7.5
September	2.2	6.2	5.0	7.4
October	2.1	6.0	5.0	7.3
November	1.8	5.9	5.2	7.2
December	1.7	5.8	5.2	7.1
<u>1998</u>				
January	1.6%	5.5%	5.1%	6.9%
February	1.4	5.6	5.1	7.0
March	1.4	5.7	5.0	7.0
April	1.4	5.6	5.0	7.0
May	1.7	5.7	5.0	7.0
June	1.7	5.5	5.0	6.9
July	1.7	5.5	5.0	6.9
August	1.7	5.3	4.9	6.9
September (p)	--	4.8	4.7	6.7

Source: Economic Indicators, Moody's Bond Record, Federal Reserve Statistical Release.

Table 2
Yield Comparisons on
Long-Term Debt
(Moody's Aa Utility Bonds)

January 1990	9.39%	March 1998	7.0%
February	9.57	April	7.0
March	9.60	May	7.0
April	9.81	June	6.9
May	9.83	July	6.9
June	9.60	August	6.9
July	<u>9.61</u>	September	<u>6.7</u>
Average ⁽¹⁾	9.63%	Average ⁽²⁾	6.92%

Source: Moody's Bond Record, page 46, September 1998.

⁽¹⁾ This represents the time period employed in the FCC's last rate of return determination.

⁽²⁾ This represents the most recent seven months for which a complete set of data is available. The September 1998 figure is preliminary.

Table 3

Monthly Dividend Yields for
Bell Regional Holding Companies the
(March - August 1998)

	<u>March</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>June - August Average</u>	<u>June - August Average</u>
Ameritech	2.63%	2.61%	2.67%	2.76%	2.51%	2.55%	2.61%	2.62%
Bell Atlantic	3.15	3.17	3.25	3.27	3.40	3.53	3.40	3.29
BellSouth	2.26	2.22	2.17	2.16	2.08	2.14	2.12	2.17
SBC Commun.	2.23	2.22	2.31	2.35	2.28	2.35	2.33	2.29
U S WEST	<u>3.96</u>	<u>3.95</u>	<u>4.12</u>	<u>4.32</u>	<u>4.19</u>	<u>4.15</u>	<u>4.22</u>	<u>4.11</u>
Average	2.85%	2.83%	2.90%	2.97%	2.89%	2.94%	2.93%	2.90%

Source: Standard & Poor's Stock Guide, April - September 1998.

Table 4

IBES and Value Line Projections of
Long-Term Growth Rate
of Earnings and Dividends per Share

	<u>Value Line</u>		<u>IBES Earnings</u>		<u>No. of Estimates</u>
	<u>Earnings</u>	<u>Dividends</u>	<u>Mean</u>	<u>Median</u>	
Ameritech	11.5%	4.5%	8.7%	9.0%	16
Bell Atlantic	9.5	3.5	8.1	8.0	17
BellSouth	12.0	2.5	8.9	8.5	18
SBC Commun.	11.5	9.0	10.5	10.8	16
U S WEST	<u>9.0</u>	<u>0.0</u>	<u>5.7</u>	<u>5.9</u>	<u>18</u>
Average	10.7%	3.9%	8.4%	8.4%	17

Source: Institutional Brokers Estimate System, earnings estimate reports for October 1998.
Value Line Investment Survey, July 10, 1998. Value Line projections are based on
the rate of growth from 1995-1997 actuals to 2001-2003 projected.

Table 5

Risk Indicators for the
Bell Regional Holding Companies
1998 versus 1990

July 1998

	<u>Safety Rating</u>	<u>Beta</u>	<u>Financial Strength</u>	<u>% Non- Utility Revenue</u>	<u>Common Equity Ratio</u>
Ameritech	1	0.95	A+	32%	48.8%
Bell Atlantic	1	0.95	A+	26	40.4
BellSouth	1	1.00	A+	15	60.3
SBC Commun.	2	0.90	A+	17	52.6
US West	<u>1</u>	<u>0.70</u>	<u>A+</u>	<u>10</u>	<u>42.7</u>
Average	1.2	0.90	A+	20.0%	46.7%

January 1990

Ameritech	1	0.90	A+	15	61.5%
Bell Atlantic	1	0.85	A+	22	58.5
BellSouth	1	1.00	A+	23	65.0
NYNEX	1	0.90	A+	18	60.5
Pacific Telesis	1	0.90	A+	17	59.0
Southwestern Bell	1	0.95	A+	18	63.5
US West	<u>1</u>	<u>0.95</u>	<u>A+</u>	<u>9</u>	<u>52.5</u>
Average	1.0	0.92	A+	17.4%	60.1%

Source: Value Line Investment Survey, January 10, 1998; January 19, 1990. Percent Non-utility revenue is defined by Value Line as "other" and for SBC includes directory advertising. For common equity ratio, see Table 8 as of 12/31/97.

Table 6

Bond Ratings Comparison
for the Bell LECs, 1990 versus 1998*

		<u>1990</u>	<u>1998</u>
(1)	Illinois Bell	Aaa	Aaa
(2)	Indiana Bell	Aaa	Aaa
(3)	Michigan Bell	Aa1	Aa1
(4)	Ohio Bell	Aaa	Aaa
(5)	Wisconsin Bell	Aaa	Aaa
(6)	Bell Atlantic-NJ	Aaa	Aaa
(7)	Bell Atlantic-PA	Aa1	Aa1
(8)	Bell Atlantic-DE	Aaa	Aaa
(9)	Bell Atlantic-MD	Aa3	Aa2
(10)	Bell Atlantic-VA	Aaa	Aaa
(11)	Bell Atlantic-D.C.	Aa3	Aa3
(12)	Bell Atlantic-WVA	Aa3	Aa2
(13)	Southern Bell	Aaa	N.A.
(14)	South Central Bell	Aaa	Aaa
(15)	New York Telephone	A1	A1
(16)	New England Tel.	Aa1	Aa2
(17)	Pacific Tel.	Aa3	A1
(18)	Nevada Bell	NA	N.A.
(19)	Southwestern Bell	Aa3	Aa3
(20)	Mountain States	Aa3	Aa3
(21)	Northwestern Bell	Aa3	Aa3
(22)	Pacific Northwest Bell	Aa3	Aa3

*Ratings are the highest indicated for a company's senior debt.

Source: Moody's Bond Record, March 1990 and September 1998 issues.

Table 7
Average BOC Capital Structure and Debt Cost, 1997
(\$000)

Company	DEBT			Total Interest on Debt	Cost of Debt	EQUITY			Total Capital	Debt Ratio	Equity Ratio
	Beg. Bal	End. Bal.	Average			Beg. Bal	End. Bal.	Average			
Ameritech											
Illinois	1,819,785	2,110,327	1,965,056	118,556	0.06033	1,321,224	1,403,581	1,362,402	3,327,458	0.59056	0.40944
Indiana	288,384	274,784	281,584	18,293	0.06496	658,358	686,836	672,597	954,181	0.29511	0.70489
Michigan	1,247,721	1,156,845	1,202,283	84,461	0.07025	1,393,137	1,467,013	1,430,075	2,632,358	0.45673	0.54327
Ohio	911,253	1,026,113	968,683	65,762	0.06789	911,975	947,771	929,873	1,898,556	0.51022	0.48978
Wisconsin	452,819	500,865	476,842	30,811	0.06461	538,426	556,092	547,259	1,024,101	0.46562	0.53438
Bell Atlantic											
DC	291,202	253,207	272,204	20,121	0.07392	412,058	464,616	438,337	710,542	0.38309	0.61691
Delaware	134,636	151,548	143,092	9,795	0.06845	202,000	206,794	204,397	347,489	0.41179	0.58821
Maryland	1,035,854	1,100,381	1,068,118	71,786	0.06721	1,440,941	1,290,088	1,365,514	2,433,632	0.43890	0.56110
New England	2,176,987	2,182,943	2,179,965	151,775	0.06962	3,208,128	3,171,236	3,189,682	5,369,647	0.40598	0.59402
New Jersey	1,531,170	1,694,666	1,612,918	112,737	0.06990	2,332,170	2,122,778	2,227,474	3,840,392	0.41999	0.58001
New York	3,937,706	3,832,857	3,885,282	354,228	0.09117	4,736,261	4,504,160	4,620,210	8,505,492	0.45680	0.54320
Pennsylvania	1,635,373	1,698,460	1,666,916	121,621	0.07296	2,265,440	1,987,374	2,126,407	3,793,324	0.43943	0.56057
Virginia	1,002,973	1,060,819	1,031,896	71,596	0.06938	1,234,493	1,074,207	1,154,350	2,186,246	0.47199	0.52801
West Virginia	264,708	264,712	264,710	18,746	0.07082	371,526	374,364	372,945	637,655	0.41513	0.58487
Bell South	8,153,523	8,031,021	8,092,272	548,595	0.06779	10,956,042	10,872,273	10,914,158	19,006,430	0.42576	0.57424
SBC											
Nevada	94,694	102,453	98,574	8,302	0.08422	131,051	119,860	125,456	224,029	0.44000	0.56000
Pacific	5,668,990	5,853,274	5,761,132	477,668	0.08291	7,256,863	6,219,442	6,738,152	12,499,284	0.46092	0.53908
Southwestern	5,189,286	5,472,538	5,330,912	369,802	0.06937	6,859,107	6,767,301	6,813,204	12,144,116	0.43897	0.56103
US West	6,359,315	5,660,216	6,009,766	430,153	0.07158	7,849,900	7,852,592	7,851,246	13,861,012	0.43357	0.56643
TOTAL	42,196,379	42,428,029	42,312,204	3,084,808	0.07144	54,079,100	52,088,378	53,083,739	95,395,943	0.44003	0.55997

Source: ARMIS 43-02 (1996 and 1997).

Table 8
Consolidated Capital Structures of the
Bell Regional Holding Companies
December 31, 1997
(million \$)

	<u>Short-Term Debt⁽¹⁾</u>	<u>Long-Term Debt</u>	<u>Preferred Stock</u>	<u>Common Equity</u>	<u>Total Capital</u>
Ameritech	\$3,036 19.0%	\$4,610 28.9%	\$0 0%	\$8,308 52.1%	\$15,954 100%
Bell Atlantic	\$6,343 19.5%	\$13,265 40.7%	\$201 0.6%	\$12,789 39.2%	\$32,597 100%
BellSouth	\$3,706 14.1%	\$7,348 28.0%	\$0 0%	\$15,165 57.8%	\$26,219 100%
SBC	\$1,953 8.2%	\$12,019 50.4%	\$0 0%	\$9,892 41.5%	\$23,864 100%
U S WEST ⁽²⁾	\$626 <u>6.4%</u>	\$5,020 <u>51.0%</u>	\$0 <u>0.0%</u>	\$4,199 <u>42.7%</u>	\$9,845 <u>100%</u>
Average	13.4%	39.8%	0.1%	46.7%	100.0%

⁽¹⁾ Short-term debt includes the current portion of long-term debt.

⁽²⁾ Based on balance sheet of U S WEST Communications Group.

Source: Company Annual Reports for 1997.

Table 9

CAPM Calculations Based on
Value Line Betas

Assumptions

- (1) Treasury bond yield = 5.0%
- (2) Treasury bill yield = 4.5%
- (3) Beta = 0.90 (Value Line, July 10, 1998)
- (4) Stock market expected return = 11% to 14%

A. CAPM Using Treasury Bond Yield as the Risk-Free Rate

$$K_e = 5.0 + 0.90 (11.0 - 5.0) = 10.4\%$$

$$K_e = 5.0 + 0.90 (12.0 - 5.0) = 11.3\%$$

$$K_e = 5.0 + 0.90 (13.0 - 5.0) = 12.2\%$$

$$K_e = 5.0 + 0.90 (14.0 - 5.0) = 13.1\%$$

B. CAPM Using Treasury Bill Yield as the Risk-Free Rate

$$K_e = 4.5 + 0.90 (11.0 - 4.5) = 10.4\%$$

$$K_e = 4.5 + 0.90 (12.0 - 4.5) = 11.3\%$$

$$K_e = 4.5 + 0.90 (13.0 - 4.5) = 12.2\%$$

$$K_e = 4.5 + 0.90 (14.0 - 4.5) = 13.1\%$$

Average of the eight studies = 11.6% (w/o the 14% market return CAPM calculations average to 11.2%)

Table 9 (cont'd.)

CAPM Calculations Based on
Standard & Poor's Betas

Assumptions

- (1) Treasury bond yield = 5.0%
- (2) Treasury bill yield = 4.5%
- (3) Beta = 0.70 (Standard & Poor's, August 1998)
- (4) Stock market expected return = 11% to 14%

A. CAPM Using Treasury Bond Yield as the Risk-Free Rate

$$K_e = 5.0 + 0.70 (11.0 - 5.0) = 9.2\%$$

$$K_e = 5.0 + 0.70 (12.0 - 5.0) = 9.9\%$$

$$K_e = 5.0 + 0.70 (13.0 - 5.0) = 12.2\%$$

$$K_e = 5.0 + 0.70 (14.0 - 5.0) = 11.3\%$$

B. CAPM Using Treasury Bill Yield as the Risk-Free Rate

$$K_e = 4.5 + 0.70 (11.0 - 4.5) = 9.1\%$$

$$K_e = 4.5 + 0.70 (12.0 - 4.5) = 9.8\%$$

$$K_e = 4.5 + 0.70 (13.0 - 4.5) = 10.5\%$$

$$K_e = 4.5 + 0.70 (14.0 - 4.5) = 11.2\%$$

Average of the eight studies = 10.2% (w/o the 14% market return CAPM calculations average to 9.9%)

Table 10

Calculation of Overall
Cost of Capital

Recommended Return

<u>Capital Type</u>	<u>% of Total⁽²⁾</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Common Equity	46.8%	11.4%	5.34%
Total Debt	<u>53.2</u>	<u>7.14⁽¹⁾</u>	<u>3.80</u>
Total	100%	--	9.14%

Return Including FCC "Adders"

<u>Capital Type</u>	<u>% of Total⁽²⁾</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Common Equity	46.8%	12.4% ⁽⁴⁾	5.80%
Total Debt	<u>53.2%</u>	<u>7.14%⁽¹⁾</u>	<u>3.80</u>
Total	100%	--	9.60%

Return Based Upon ARMIS 1997 Capital Structures

<u>Capital Type</u>	<u>% of Total⁽³⁾</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Common Equity	56.0%	11.4%	6.38%
Total Debt	<u>44.0%</u>	<u>7.14%⁽¹⁾</u>	<u>3.14</u>
Total	100%	--	9.52%

⁽¹⁾ Cost of debt is based upon 1997 data. See Table 7.

⁽²⁾ Capital structure is based on the five RBOCs at December 31, 1997.

⁽³⁾ Source: Table 7.

⁽⁴⁾ Based on DCF analysis plus the FCC "adders" to the DCF results in CC Docket No. 89-624.

Appendix D

RBOC Pricing Information

Ameritech Pricing Information

FACILITY

Ckt Type	Charge Type	State	Zone	USOC	Monthly	OPP 12 Mo	OPP 24 Mo	OPP 36 Mo	OPP 48 Mo	OPP 60 Mo	DCP 36 Mo	DCP 60 Mo
DSALL	CHAN TERM	ALL	ALL	T8ECS	\$ 97.00	\$ 88.00	\$ 76.36	\$ 70.55	\$ 68.47	\$ 66.40	\$ 78.85	\$ 74.70
DSALL	MLG TERM	ALL	ALL	CM6	\$ 14.50	\$ 13.25	\$ 12.20	\$ 11.41	\$ 11.18	\$ 10.98	\$ 12.61	\$ 11.94
DSALL	PER MILE	ALL	ALL	1L5XX	\$ 1.15	\$ 1.08	\$ 0.98	\$ 0.98	\$ 0.93	\$ 0.91	\$ 0.98	\$ 0.93
DS02.4	CHAN TERM	IL	ALL	T8ECS	\$ 138.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	CHAN TERM	IN	ALL	T8ECS	\$ 138.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	CHAN TERM	MI	ALL	T8ECS	\$ 138.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	CHAN TERM	OH	ALL	T8ECS	\$ 138.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	CHAN TERM	WI	ALL	T8ECS	\$ 167.30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	MLG TERM	IL	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	MLG TERM	IN	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	MLG TERM	MI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	MLG TERM	OH	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	MLG TERM	WI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	PER MILE	IL	ALL	1L5XX	\$ 1.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	PER MILE	IN	ALL	1L5XX	\$ 2.45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	PER MILE	MI	ALL	1L5XX	\$ 1.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	PER MILE	OH	ALL	1L5XX	\$ 2.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS02.4	PER MILE	WI	ALL	1L5XX	\$ 1.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	CHAN TERM	IL	ALL	T8ECS	\$ 139.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	CHAN TERM	IN	ALL	T8ECS	\$ 139.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	CHAN TERM	MI	ALL	T8ECS	\$ 139.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	CHAN TERM	OH	ALL	T8ECS	\$ 139.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	CHAN TERM	WI	ALL	T8ECS	\$ 177.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	MLG TERM	IL	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	MLG TERM	IN	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	MLG TERM	MI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	MLG TERM	OH	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	MLG TERM	WI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	PER MILE	IL	ALL	1L5XX	\$ 1.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	PER MILE	IN	ALL	1L5XX	\$ 2.45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	PER MILE	MI	ALL	1L5XX	\$ 1.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	PER MILE	OH	ALL	1L5XX	\$ 2.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS04.8	PER MILE	WI	ALL	1L5XX	\$ 1.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	CHAN TERM	IL	ALL	T8ECS	\$ 243.33	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	CHAN TERM	IN	ALL	T8ECS	\$ 215.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	CHAN TERM	MI	ALL	T8ECS	\$ 215.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	CHAN TERM	OH	ALL	T8ECS	\$ 215.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	CHAN TERM	WI	ALL	T8ECS	\$ 258.53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	MLG TERM	IL	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	MLG TERM	IN	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	MLG TERM	MI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	MLG TERM	OH	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	MLG TERM	WI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	PER MILE	IL	ALL	1L5XX	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	PER MILE	IN	ALL	1L5XX	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	PER MILE	MI	ALL	1L5XX	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	PER MILE	OH	ALL	1L5XX	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS056	PER MILE	WI	ALL	1L5XX	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	CHAN TERM	IL	ALL	T8ECS	\$ 145.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	CHAN TERM	IN	ALL	T8ECS	\$ 145.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	CHAN TERM	MI	ALL	T8ECS	\$ 145.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	CHAN TERM	OH	ALL	T8ECS	\$ 145.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	CHAN TERM	WI	ALL	T8ECS	\$ 202.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	MLG TERM	IL	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	MLG TERM	IN	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	MLG TERM	MI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	MLG TERM	OH	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	MLG TERM	WI	ALL	CM6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	PER MILE	IL	ALL	1L5XX	\$ 1.78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	PER MILE	IN	ALL	1L5XX	\$ 2.45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	PER MILE	MI	ALL	1L5XX	\$ 1.78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	PER MILE	OH	ALL	1L5XX	\$ 2.59	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS09.6	PER MILE	WI	ALL	1L5XX	\$ 1.78	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS1	CHAN TERM	ALL	1	T24X1	\$ 225.00	\$ 205.00	\$ 158.00	\$ 124.58	\$ 122.00	\$ 112.50	\$ 134.87	\$ 127.38
DS1	CHAN TERM	ALL	2	T24X2	\$ 231.00	\$ 211.00	\$ 184.00	\$ 128.71	\$ 126.00	\$ 116.25	\$ 139.36	\$ 131.62
DS1	CHAN TERM	ALL	3	T24X3	\$ 244.00	\$ 224.00	\$ 178.00	\$ 138.40	\$ 136.00	\$ 125.00	\$ 149.85	\$ 141.53
DS1	MLG TERM	IL	1	C24X1	\$ 81.00	\$ 71.00	\$ 61.00	\$ 37.89	\$ 34.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	IL	2	C24X2	\$ 81.00	\$ 71.00	\$ 61.00	\$ 37.89	\$ 34.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	IL	3	C24X3	\$ 81.00	\$ 71.00	\$ 61.00	\$ 37.89	\$ 34.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	IN	1	C24X1	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	IN	2	C24X2	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	IN	3	C24X3	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	MI	1	C24X1	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	MI	2	C24X2	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	MI	3	C24X3	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	OH	1	C24X1	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	OH	2	C24X2	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	OH	3	C24X3	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	WI	1	C24X1	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	WI	2	C24X2	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MLG TERM	WI	3	C24X3	\$ 81.00	\$ 71.00	\$ 65.00	\$ 37.89	\$ 37.00	\$ 24.80	\$ 47.99	\$ 38.78
DS1	MUX	ALL	1	QMVX1	\$ 390.00	\$ 370.00	\$ 322.00	\$ 259.25	\$ 249.00	\$ 244.00	\$ 274.50	\$ 259.25
DS1	MUX	ALL	2	QMVX2	\$ 390.00	\$ 370.00	\$ 322.00	\$ 259.25	\$ 249.00	\$ 244.00	\$ 274.50	\$ 259.25
DS1	MUX	ALL	3	QMVX3	\$ 390.00	\$ 370.00	\$ 322.00	\$ 259.25	\$ 249.00	\$ 244.00	\$ 274.50	\$ 259.25
DS1	PER MILE	ALL	1	1YZX1	\$ 25.00	\$ 23.00	\$ 22.00	\$ 15.82	\$ 15.00	\$ 13.84	\$ 18.68	\$ 17.65

FACILITY

DS1	PER MILE	ALL	2	1Y2X2	\$ 25.00	\$ 23.00	\$ 22.00	\$ 15.82	\$ 15.00	\$ 13.84	\$ 18.68	\$ 17.65
DS1	PER MILE	ALL	3	1Y2X3	\$ 25.00	\$ 23.00	\$ 22.00	\$ 15.82	\$ 15.00	\$ 13.84	\$ 18.68	\$ 17.65
DS3	CHAN TERM	IL	1	PCG31	\$ 2,070.00	\$ 2,070.00	\$ 1,780.00	\$ 855.00	\$ 734.00	\$ 608.00	\$ -	\$ -
DS3	CHAN TERM	IL	1	CZ4X1	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	IL	2	PCG32	\$ 2,139.00	\$ 2,139.00	\$ 1,818.00	\$ 901.00	\$ 775.00	\$ 643.00	\$ -	\$ -
DS3	CHAN TERM	IL	2	CZ4X2	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	IL	3	PCG33	\$ 2,300.00	\$ 2,300.00	\$ 1,955.00	\$ 933.00	\$ 804.00	\$ 668.00	\$ -	\$ -
DS3	CHAN TERM	IL	3	CZ4X3	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	IN	1	PCG31	\$ 2,070.00	\$ 2,070.00	\$ 1,780.00	\$ 855.00	\$ 734.00	\$ 608.00	\$ -	\$ -
DS3	CHAN TERM	IN	1	CZ4X1	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	IN	2	PCG32	\$ 2,139.00	\$ 2,139.00	\$ 1,818.00	\$ 901.00	\$ 775.00	\$ 643.00	\$ -	\$ -
DS3	CHAN TERM	IN	2	CZ4X2	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	IN	3	PCG33	\$ 2,300.00	\$ 2,300.00	\$ 1,955.00	\$ 933.00	\$ 804.00	\$ 668.00	\$ -	\$ -
DS3	CHAN TERM	IN	3	CZ4X3	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	MI	1	PCG31	\$ 2,070.00	\$ 2,070.00	\$ 1,780.00	\$ 855.00	\$ 734.00	\$ 608.00	\$ -	\$ -
DS3	CHAN TERM	MI	1	CZ4X1	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	MI	2	PCG32	\$ 2,139.00	\$ 2,139.00	\$ 1,818.00	\$ 901.00	\$ 775.00	\$ 643.00	\$ -	\$ -
DS3	CHAN TERM	MI	2	CZ4X2	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	MI	3	PCG33	\$ 2,300.00	\$ 2,300.00	\$ 1,955.00	\$ 933.00	\$ 804.00	\$ 668.00	\$ -	\$ -
DS3	CHAN TERM	MI	3	CZ4X3	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	OH	1	PCG31	\$ 2,070.00	\$ 2,070.00	\$ 1,780.00	\$ 855.00	\$ 734.00	\$ 608.00	\$ -	\$ -
DS3	CHAN TERM	OH	1	CZ4X1	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	OH	2	PCG32	\$ 2,139.00	\$ 2,139.00	\$ 1,818.00	\$ 901.00	\$ 775.00	\$ 643.00	\$ -	\$ -
DS3	CHAN TERM	OH	2	CZ4X2	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	OH	3	PCG33	\$ 2,300.00	\$ 2,300.00	\$ 1,955.00	\$ 933.00	\$ 804.00	\$ 668.00	\$ -	\$ -
DS3	CHAN TERM	OH	3	CZ4X3	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	WI	1	PCG31	\$ 2,070.00	\$ 2,070.00	\$ 1,780.00	\$ 855.00	\$ 734.00	\$ 608.00	\$ -	\$ -
DS3	CHAN TERM	WI	1	CZ4X1	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	WI	2	PCG32	\$ 2,139.00	\$ 2,139.00	\$ 1,818.00	\$ 901.00	\$ 775.00	\$ 643.00	\$ -	\$ -
DS3	CHAN TERM	WI	2	CZ4X2	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	CHAN TERM	WI	3	PCG33	\$ 2,300.00	\$ 2,300.00	\$ 1,955.00	\$ 933.00	\$ 804.00	\$ 668.00	\$ -	\$ -
DS3	CHAN TERM	WI	3	CZ4X3	\$ 375.00	\$ 350.00	\$ 324.10	\$ 289.44	\$ 280.63	\$ 281.82	\$ -	\$ -
DS3	MLG TERM	IL	1	1Y2X1	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	IL	2	1Y2X2	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	IL	3	1Y2X3	\$ 120.00	\$ 110.00	\$ 100.00	\$ 82.36	\$ 74.64	\$ 63.50	\$ -	\$ -
DS3	MLG TERM	IN	1	1Y2X1	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	IN	2	1Y2X2	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	IN	3	1Y2X3	\$ 120.00	\$ 110.00	\$ 100.00	\$ 82.36	\$ 74.64	\$ 63.50	\$ -	\$ -
DS3	MLG TERM	MI	1	1Y2X1	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	MI	2	1Y2X2	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	MI	3	1Y2X3	\$ 120.00	\$ 110.00	\$ 100.00	\$ 82.36	\$ 74.64	\$ 63.50	\$ -	\$ -
DS3	MLG TERM	OH	1	1Y2X1	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	OH	2	1Y2X2	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	OH	3	1Y2X3	\$ 120.00	\$ 110.00	\$ 100.00	\$ 82.36	\$ 74.64	\$ 63.50	\$ -	\$ -
DS3	MLG TERM	WI	1	1Y2X1	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	WI	2	1Y2X2	\$ 120.00	\$ 110.00	\$ 100.00	\$ 72.36	\$ 59.64	\$ 40.00	\$ -	\$ -
DS3	MLG TERM	WI	3	1Y2X3	\$ 120.00	\$ 110.00	\$ 100.00	\$ 82.36	\$ 74.64	\$ 63.50	\$ -	\$ -
DS3	MUX	ALL	1	QM3X1	\$ 675.00	\$ 585.12	\$ 524.70	\$ 508.80	\$ -	\$ -	\$ -	\$ -
DS3	MUX	ALL	2	QM3X2	\$ 675.00	\$ 585.12	\$ 524.70	\$ 508.80	\$ -	\$ -	\$ -	\$ -
DS3	MUX	ALL	3	QM3X3	\$ 686.40	\$ 585.12	\$ 524.70	\$ 508.80	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN EL	ALL	1	HZ4X1	\$ 400.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN EL	ALL	2	HZ4X1	\$ 400.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN EL	ALL	3	HZ4X1	\$ 400.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN OPL	ALL	2	HZ4X1	\$ 300.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN OPL	ALL	1	HZ4X1	\$ 300.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3	SVC CHAN OPL	ALL	3	HZ4X1	\$ 300.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DS3012	CHAN TERM	IL	1	PCG31	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	IL	2	PCG32	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	IL	3	PCG33	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	IN	1	PCG31	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	IN	2	PCG32	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	IN	3	PCG33	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	MI	1	PCG31	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	MI	2	PCG32	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	MI	3	PCG33	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	OH	1	PCG31	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	OH	2	PCG32	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	OH	3	PCG33	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	W	1	PCG31	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	WI	2	PCG32	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3012	CHAN TERM	WI	3	PCG33	\$12,600.00	\$ 12,600.00	\$ 7,885.00	\$ 4,900.00	\$ 4,000.00	\$ 3,000.00	\$ -	\$ -
DS3024	CHAN TERM	IL	1	PCG31	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	IL	2	PCG32	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	IL	3	PCG33	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	IN	1	PCG31	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	IN	2	PCG32	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	IN	3	PCG33	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	MI	1	PCG31	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	MI	2	PCG32	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	MI	3	PCG33	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	OH	1	PCG31	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	OH	2	PCG32	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	OH	3	PCG33	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	WI	1	PCG31	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	WI	2	PCG32	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -
DS3024	CHAN TERM	WI	3	PCG33	\$18,900.00	\$ 18,900.00	\$ 12,450.00	\$ 7,000.00	\$ 5,400.00	\$ 4,000.00	\$ -	\$ -

FACILITY[illegible]

Bell Atlantic Pricing Information

BELL ATLANTIC INTERSTATE RATES
SWITCHED ACCESS SERVICE
SWITCHED TRANSPORT

Entrance Facilities

Voice Grade - Per Point of Termination

Two-wire		MRC		
Zone 1	EF2X2	\$26.48		
Zone 2	EF2X2	\$26.48		
Zone 3	EF2X2	\$26.48		
Four-wire				
Zone 1	EF2X4	\$52.95		
Zone 2	EF2X4	\$52.95		
Zone 3	EF2X4	\$52.95		
Two-wire - Installation/Change		NRC - First	NRC - Additional	
Zone 1	EF2X2	\$1.00	\$0.75	
Zone 2	EF2X2	\$1.00	\$0.75	
Zone 3	EF2X2	\$1.00	\$0.75	
Two-wire - Rearrangement				
Zone 1	NRBOY	\$0.90	\$0.60	
Zone 2	NRBOY	\$0.90	\$0.60	
Zone 3	NRBOY	\$0.90	\$0.60	
Four-wire - Installation/Change				
Zone 1	EF2X4	\$1.00	\$0.75	
Zone 2	EF2X4	\$1.00	\$0.75	
Zone 3	EF2X4	\$1.00	\$0.75	
Four-wire - Rearrangement				
Zone 1	NRBOZ	\$0.90	\$0.60	
Zone 2	NRBOZ	\$0.90	\$0.60	
Zone 3	NRBOZ	\$0.90	\$0.60	

DS1 - Per Point of Termination

		MRC		
Zone 1	EF2X4	\$210.00		
Zone 2	EF2X4	\$245.00		
Zone 3	EF2X4	\$260.00		
Installation/Change		NRC - First	NRC - Additional	
Zone 1	EF2X4	\$325.00	\$200.00	
Zone 2	EF2X4	\$325.00	\$200.00	
Zone 3	EF2X4	\$325.00	\$200.00	
Rearrangement				
Zone 1	NRBOZ	\$0.90	\$0.60	
Zone 2	NRBOZ	\$0.90	\$0.60	
Zone 3	NRBOZ	\$0.90	\$0.60	

DS3 - Per Point of Termination

Electrical Interface		MRC	NRC - First	
Zone 1	EF2X4	\$2,979.90	\$1.00	
Zone 2	EF2X4	\$3,018.06	\$1.00	
Zone 3	EF2X4	\$3,068.34	\$1.00	
Optical Interface				
Zone 1	EF2CX	\$2,786.40	\$1.00	
Zone 2	EF2CX	\$2,847.96	\$1.00	
Zone 3	EF2CX	\$2,921.29	\$1.00	

DS3C - Per Point of Termination [only available in DC, PA, MD, NJ, DE and VA]

Electrical Interface

Zone 1	EF60X	\$8,939.70	\$1.00
Zone 2	EF60X	\$9,078.48	\$1.00
Zone 3	EF60X	\$9,254.03	\$1.00

Optical Interface [not available to new customers after 8/7/98]

Zone 1	EO80X	\$8,359.20	\$1.00
Zone 2	EO80X	\$8,495.28	\$1.00
Zone 3	EO80X	\$8,665.85	\$1.00

Tandem Switched Transport**Tandem Transport****Usage - Fixed****Usage - Per Mile**

Zone 1	\$0.000150	\$0.000030
Zone 2	\$0.000150	\$0.000030
Zone 3	\$0.000150	\$0.000030

Tandem Switching - Per MOU**MRC**

Zone 1	\$0.000800
Zone 2	\$0.000800
Zone 3	\$0.000800

Direct Trunked Transport**Voice Grade****MRC - Fixed****MRC - Per Mile**

Zone 1	1YTXS	\$15.00	\$0.45
Zone 2	1YTXS	\$15.00	\$0.45
Zone 3	1YTXS	\$15.00	\$0.45

DS1

Zone 1	1YTXS	\$60.00	\$17.70
Zone 2	1YTXS	\$60.00	\$17.70
Zone 3	1YTXS	\$60.00	\$17.70

DS3 - Optical

Zone 1	1YTXS	\$849.51	\$169.90
Zone 2	1YTXS	\$849.51	\$169.90
Zone 3	1YTXS	\$849.51	\$169.90

DS3 - Electrical

Zone 1	1YTXS	\$849.51	\$169.90
Zone 2	1YTXS	\$849.51	\$169.90
Zone 3	1YTXS	\$849.51	\$169.90

DS3C [only available in DC, PA, MD, NJ, DE and VA] -**Electrical and Optical [not available to new customers after 8/7/98]**

Zone 1	1YT0S	\$2,548.53	\$509.71
Zone 2	1YT0S	\$2,548.53	\$509.71
Zone 3	1YT0S	\$2,548.53	\$509.71

Multiplexing**Entrance Facility - Per Arrangement****DS1 to Voice Grade****MRC****NRC**

Zone 1	MKW1X	\$198.00
Zone 2	MKW1X	\$208.00

	Zone 3	MKW1X	\$220.00	
DS3 to DS1				
	Zone 1	MKW3X	\$484.65	\$600.00
	Zone 2	MKW3X	\$497.02	\$600.00
	Zone 3	MKW3X	\$508.20	\$600.00

Direct Trunked Transport - Per Arrangement

DS1 to Voice Grade

	Zone 1	M6W1X	\$153.36	
	Zone 2	M6W1X	\$153.36	
	Zone 3	M6W1X	\$153.36	
DS3 to DS1				
	Zone 1	M6W3X	\$484.65	\$600.00
	Zone 2	M6W3X	\$497.02	\$600.00
	Zone 3	M6W3X	\$508.20	\$600.00

Alternative Serving Wire Center

DS1 - Per Point of Termination

MRC

Zone 1	AV3	\$25.00
Zone 2	AV3	\$25.00
Zone 3	AV3	\$25.00

DS3 (Optical or Electrical) - Per Point of Termination

Zone 1	AV3	\$250.00
Zone 2	AV3	\$250.00
Zone 3	AV3	\$250.00

Diversity

Per Circuit

MRC

Zone 1	DSX	\$5.00
Zone 2	DSX	\$5.00
Zone 3	DSX	\$5.00

Switched Access Connection Charge

Per Line or Trunk

Initial

NRC

Zone 1	TPP++	\$1.00
Zone 2	TPP++	\$1.00
Zone 3	TPP++	\$1.00

Additional

Zone 1	TPP++	\$0.75
Zone 2	TPP++	\$0.75
Zone 3	TPP++	\$0.75

Shared Network Arrangement

Processing Charge Per Service Order

NRC

Zone 1	\$50.00
Zone 2	\$50.00
Zone 3	\$50.00

TERM PRICING PLANS

[Term Pricing Plans are only available in DC, PA, MD, NJ, DE and VA.]

Entrance Facility**2 Year**

DS1 - Per Point of Termination		MRC		
Zone 1	EF6AX	\$192.08		
Zone 2	EF6AX	\$195.00		
Zone 3	EF6AX	\$195.00		
DS1 - Installation		NRC - First	NRC - Additional	
Zone 1	EF6AX	\$1.00	\$0.75	
Zone 2	EF6AX	\$1.00	\$0.75	
Zone 3	EF6AX	\$1.00	\$0.75	

3 Year

DS1 - Per Point of Termination		MRC		
Zone 1	EF6BX	\$177.30		
Zone 2	EF6BX	\$180.00		
Zone 3	EF6BX	\$180.00		
DS1 - Installation		NRC - First	NRC - Additional	
Zone 1	EF6BX	\$1.00	\$0.75	
Zone 2	EF6BX	\$1.00	\$0.75	
Zone 3	EF6BX	\$1.00	\$0.75	

DS3 - Per Point of Termination

Electrical Interface		MRC
Zone 1	EF6MX	\$2,812.25
Zone 2	EF6MX	\$2,824.40
Zone 3	EF6MX	\$2,846.81

DS3 - Installation		NRC
Zone 1	EF6MX	\$1.00
Zone 2	EF6MX	\$1.00
Zone 3	EF6MX	\$1.00

DS3 - Per Point of Termination

Optical Interface		MRC
Zone 1	EO8MX	\$2,346.19
Zone 2	EO8MX	\$2,357.10
Zone 3	EO8MX	\$2,377.23

DS3 - Installation		NRC
Zone 1	EO8MX	\$1.00
Zone 2	EO8MX	\$1.00
Zone 3	EO8MX	\$1.00

DS3C - Per Point of Termination

Electrical Interface		MRC
Zone 1	EF6PX	\$5,708.25
Zone 2	EF6PX	\$5,734.80
Zone 3	EF6PX	\$5,783.77

DS3C - Installation		NRC
Zone 1	EF6PX	\$1.00
Zone 2	EF6PX	\$1.00

Zone 3	EF6PX	\$1.00			
Optical Interface		MRC			
[not available to new customers after 8/7/98]					
Zone 1	EO8PX	\$5,514.75			
Zone 2	EO8PX	\$5,540.40			
Zone 3	EO8PX	\$5,587.71			
DS3C - Installation		NRC			
Zone 1	EO8PX	\$1.00			
Zone 2	EO8PX	\$1.00			
Zone 3	EO8PX	\$1.00			
DS3G					
Service Arrangement - Electrical Interface		MRC	NRC - Initial	NRC - Subsequent - First	NRC - Subsequent - Additional
Zone 1	EFNTX	\$3,360.00	\$2.00		
Zone 2	EFNTX	\$3,528.00	\$2.00		
Zone 3	EFNTX	\$3,696.00	\$2.00		
Per DS3 Facility - Electrical Interface					
Zone 1	EF6TX	\$336.00	\$1.00	\$0.75	\$0.75
Zone 2	EF6TX	\$352.80	\$1.00	\$0.75	\$0.75
Zone 3	EF6TX	\$369.60	\$1.00	\$0.75	\$0.75
Service Arrangement - Optical Interface					
Zone 1	EFNVX	\$3,360.00	\$2.00		
Zone 2	EFNVX	\$3,528.00	\$2.00		
Zone 3	EFNVX	\$3,696.00	\$2.00		
Per DS3 Facility - Optical Interface					
Zone 1	EO8VX	\$210.00	\$1.00	\$0.75	\$0.75
Zone 2	EO8VX	\$220.50	\$1.00	\$0.75	\$0.75
Zone 3	EO8VX	\$231.00	\$1.00	\$0.75	\$0.75
5 Year					
DS1 - Per Point of Termination		MRC			
Zone 1	EF6KX	\$157.60			
Zone 2	EF6KX	\$160.00			
Zone 3	EF6KX	\$160.00			
DS1 - Installation		NRC - First	NRC - Additional		
Zone 1	EF6KX	\$1.00	\$0.75		
Zone 2	EF6KX	\$1.00	\$0.75		
Zone 3	EF6KX	\$1.00	\$0.75		
DS3 - Per Point of Termination					
Electrical Interface		MRC			
Zone 1	EF6NX	\$1,741.50			
Zone 2	EF6NX	\$1,749.60			
Zone 3	EF6NX	\$1,764.54			
DS3 - Installation		NRC			
Zone 1	EF6NX	-			
Zone 2	EF6NX	-			
Zone 3	EF6NX	-			
DS3 - Per Point of Termination					
Optical Interface		MRC			
Zone 1	EO8NX	\$1,499.63			
Zone 2	EO8NX	\$1,506.60			
Zone 3	EO8NX	\$1,519.47			
DS3 - Installation		NRC			
Zone 1	EO8NX	-			
Zone 2	EO8NX	-			

Zone 3	EO8NX	-				
DS3C - Per Point of Termination						
Electrical Interface		MRC				
Zone 1	EF6QX	\$4,019.96				
Zone 2	EF6QX	\$4,038.66				
Zone 3	EF6QX	\$4,073.15				
DS3C - Installation		NRC				
Zone 1	EF6QX	\$1.00				
Zone 2	EF6QX	\$1.00				
Zone 3	EF6QX	\$1.00				
Optical Interface		MRC				
[not available to new customers after 8/7/98]						
Zone 1	EO8QX	\$3,483.00				
Zone 2	EO8QX	\$3,499.20				
Zone 3	EO8QX	\$3,529.08				
DS3C - Installation		NRC				
Zone 1	EO8QX	\$1.00				
Zone 2	EO8QX	\$1.00				
Zone 3	EO8QX	\$1.00				
DS3G						
Service Arrangement - Electrical Interface		MRC	NRC - Initial	NRC - Subsequent - First	NRC - Subsequent - Additional	
Zone 1	EFNUX	\$2,400.00	\$2.00			
Zone 2	EFNUX	\$2,520.00	\$2.00			
Zone 3	EFNUX	\$2,640.00	\$2.00			
Per DS3 Facility - Electrical Interface						
Zone 1	EF6UX	\$240.00	\$1.00	\$0.75	\$0.75	
Zone 2	EF6UX	\$240.00	\$1.00	\$0.75	\$0.75	
Zone 3	EF6UX	\$264.00	\$1.00	\$0.75	\$0.75	
Service Arrangement - Optical Interface						
Zone 1	EFNWX	\$2,400.00	\$2.00			
Zone 2	EFNWX	\$2,520.00	\$2.00			
Zone 3	EFNWX	\$2,640.00	\$2.00			
Per DS3 Facility - Optical Interface						
Zone 1	EO8WX	\$150.00	\$1.00	\$0.75	\$0.75	
Zone 2	EO8WX	\$157.50	\$1.00	\$0.75	\$0.75	
Zone 3	EO8WX	\$165.00	\$1.00	\$0.75	\$0.75	
7 Year						
DS1 - Per Point of Termination		MRC				
Zone 1	EF6LX	\$152.68				
Zone 2	EF6LX	\$155.00				
Zone 3	EF6LX	\$155.00				
DS1 - Installation		NRC - First	NRC - Additional			
Zone 1	EF6LX	\$1.00	\$0.75			
Zone 2	EF6LX	\$1.00	\$0.75			
Zone 3	EF6LX	\$1.00	\$0.75			
Direct Trunked Transport						
2 Year						
DS1		Fixed	Per Mile			
Zone 1	1YTAS	\$55.00	\$13.45			
Zone 2	1YTAS	\$55.00	\$13.45			

	Zone 3	1YTAS	\$55.00	\$13.45
3 Year				
DS1			Fixed	Per Mile
	Zone 1	1YTBS	\$50.00	\$11.85
	Zone 2	1YTBS	\$50.00	\$11.85
	Zone 3	1YTBS	\$50.00	\$11.85
DS3				
	Zone 1	1YTMS	\$750.40	\$136.87
	Zone 2	1YTMS	\$750.40	\$136.87
	Zone 3	1YTMS	\$750.40	\$136.87
DS3C				
	Zone 1	1YTPS	\$2,251.20	\$410.60
	Zone 2	1YTPS	\$2,251.20	\$410.60
	Zone 3	1YTPS	\$2,251.20	\$410.60
5 Year				
DS1			Fixed	Per Mile
	Zone 1	1YTKS	\$45.00	\$8.43
	Zone 2	1YTKS	\$45.00	\$8.43
	Zone 3	1YTKS	\$45.00	\$8.43
DS3				
	Zone 1	1YTNS	\$707.93	\$75.51
	Zone 2	1YTNS	\$707.93	\$75.51
	Zone 3	1YTNS	\$707.93	\$75.51
DS3C				
	Zone 1	1YTQS	\$2,123.78	\$226.54
	Zone 2	1YTQS	\$2,123.78	\$226.54
	Zone 3	1YTQS	\$2,123.78	\$226.54
7 Year				
DS1			Fixed	Per Mile
	Zone 1	1YTLS	\$45.00	\$8.03
	Zone 2	1YTLS	\$45.00	\$8.03
	Zone 3	1YTLS	\$45.00	\$8.03

Multiplexing

2 Year

Entrance Facility - Per Arrangement

DS1 to Voice Grade		MRC	
	Zone 1	MKWAX	\$149.10
	Zone 2	MKWAX	\$149.10
	Zone 3	MKWAX	\$149.10

Direct Trunked Transport - Per Arrangement

DS1 to Voice Grade		MRC	
	Zone 1	M6WAX	\$149.10
	Zone 2	M6WAX	\$149.10
	Zone 3	M6WAX	\$149.10

3 Year

Entrance Facility - Per Arrangement

DS1 to Voice Grade		MRC	NRC
	Zone 1	MKW BX	\$144.84

	Zone 2	MKWBX	\$144.84	
	Zone 3	MKWBX	\$144.84	
DS3 to DS1				
	Zone 1	MKWSX	\$438.49	\$600.00
	Zone 2	MKWSX	\$449.68	\$600.00
	Zone 3	MKWSX	\$459.80	\$600.00

Direct Trunked Transport - Per Arrangement

DS1 to Voice Grade			MRC	NRC
	Zone 1	M6WBX	\$144.84	
	Zone 2	M6WBX	\$144.84	
	Zone 3	M6WBX	\$144.84	
DS3 to DS1				
	Zone 1	M6WSX	\$438.49	\$600.00
	Zone 2	M6WSX	\$449.68	\$600.00
	Zone 3	M6WSX	\$459.80	\$600.00

5 Year

Entrance Facility - Per Arrangement

DS1 to Voice Grade			MRC	NRC
	Zone 1	MKWKX	\$140.68	
	Zone 2	MKWKX	\$140.68	
	Zone 3	MKWKX	\$140.68	
DS3 to DS1				
	Zone 1	MKWTX	\$392.33	\$600.00
	Zone 2	MKWTX	\$402.35	\$600.00
	Zone 3	MKWTX	\$411.40	\$600.00

Direct Trunked Transport - Per Arrangement

DS1 to Voice Grade			MRC	NRC
	Zone 1	M6WKX	\$140.68	
	Zone 2	M6WKX	\$140.68	
	Zone 3	M6WKX	\$140.68	
DS3 to DS1				
	Zone 1	M6WTX	\$392.33	\$600.00
	Zone 2	M6WTX	\$402.35	\$600.00
	Zone 3	M6WTX	\$411.40	\$600.00

7 Year

Entrance Facility - Per Arrangement

DS1 to Voice Grade			MRC	
	Zone 1	MKWLX	\$136.32	
	Zone 2	MKWLX	\$136.32	
	Zone 3	MKWLX	\$136.32	

Direct Trunked Transport - Per Arrangement

DS1 to Voice Grade			MRC	
	Zone 1	M6WLX	\$136.32	
	Zone 2	M6WLX	\$136.32	
	Zone 3	M6WLX	\$136.32	

**NYNEX INTERSTATE RATES
SWITCHED ACCESS SERVICE
LOCAL TRANSPORT**

Entrance Facility - Standard Channel Termination

Voice Grade		MRC	NRC - First	NRC - Additional
Two-wire	EFG2X	\$37.50	\$286.80	\$195.50
Four-wire	EFG2X	\$62.11	\$408.36	\$272.96

DS1 - Massachusetts		MRC	NRC - First	NRC - Additional
Zone 1	EFGDX	\$210.60	\$250.00	\$150.00
Zone 2	EFGDX	\$268.00	\$250.00	\$150.00
Zone 3	EFGDX	\$277.00	\$250.00	\$150.00

DS1 - NY, CT		MRC	NRC - First	NRC - Additional
Zone 1	EFGDX	\$210.60	\$250.00	\$150.00
Zone 2	EFGDX	\$268.00	\$250.00	\$150.00
Zone 3	EFGDX	\$277.00	\$250.00	\$150.00

DS1 - MA, NH, RI, VT		MRC	NRC - First	NRC - Additional
	EFGDX	\$277.00	\$250.00	\$150.00

DS3 - Electrical - Massachusetts

Zone 1		MRC - Fixed	MRC - Per 1/4 Mile	NRC - First	NRC - Additional
1st channel	EFG3G	\$1,846.16	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,461.54	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$369.23	\$0.00	\$0.00	\$0.00
10th channel & over	EFNDG	\$369.23	\$0.00	\$0.00	\$0.00
Zone 2					
1st channel	EFG3G	\$1,938.47	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,534.62	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$387.69	\$0.00	\$0.00	\$0.00
10th channel & over	EFNDG	\$387.69	\$0.00	\$0.00	\$0.00
Zone 3					
1st channel	EFG3G	\$2,030.78	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,607.69	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$406.15	\$0.00	\$0.00	\$0.00
10th channel & over	EFNDG	\$406.15	\$0.00	\$0.00	\$0.00

DS3 - Electrical - NY, CT

Zone 1		MRC - Fixed	MRC - Per 1/4 Mile	NRC - First	NRC - Additional
1st channel	EFG3G	\$1,846.16	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,461.54	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$369.23	\$0.00	\$0.00	\$0.00
10th channel & over	EFNDG	\$369.23	\$0.00	\$0.00	\$0.00
Zone 2					
1st channel	EFG3G	\$1,938.47	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,534.62	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$387.69	\$0.00	\$0.00	\$0.00

10th channel & over	EFNDG	\$387.69	\$0.00	\$0.00	\$0.00
Zone 3					
1st channel	EFG3G	\$2,030.78	\$0.00	\$0.00	\$0.00
2nd-3rd channel	EFNBG	\$1,607.69	\$0.00	\$0.00	\$0.00
4th-9th channel	EFNCG	\$406.15	\$0.00	\$0.00	\$0.00
10th channel & over	EFNDG	\$406.15	\$0.00	\$0.00	\$0.00

DS3 - Electrical - MA, NH, RI, VT

EFG3G	\$2,030.78	\$0.00	\$0.00	\$0.00
-------	------------	--------	--------	--------

DS3 - Optical - Per DS3 Channel - Massachusetts

135 Mbps		MRC - Fixed	MRC - Per 1/4 Mile	NRC - First	NRC - Additional
1st channel	EFG6G	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNFG	\$493.00	\$68.00	\$0.00	\$0.00
560 Mbps					
1st channel	EFG8G	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNLG	\$493.00	\$68.00	\$0.00	\$0.00
4th-9th channel	EFNMG	\$493.00	\$68.00	\$0.00	\$0.00
10th channel & over	EFNNG	\$493.00	\$68.00	\$0.00	\$0.00
2.488 Gbps					
1st channel	EFNPG	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNQG	\$493.00	\$68.00	\$0.00	\$0.00
4th-9th channel	EFNRG	\$493.00	\$68.00	\$0.00	\$0.00
10th-48th channel	EFNSG	\$493.00	\$68.00	\$0.00	\$0.00

DS3 - Optical - Per DS3 Channel - NY, CT

135 Mbps		MRC - Fixed	MRC - Per 1/4 Mile	NRC - First	NRC - Additional
1st channel	EFG6G	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNFG	\$550.00	\$68.00	\$0.00	\$0.00
405 Mbps					
1st channel	EFG7G	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNHG	\$550.00	\$68.00	\$0.00	\$0.00
4th-9th channel	EFNJG	\$550.00	\$64.00	\$0.00	\$0.00
560 Mbps					
1st channel	EFG8G	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNLG	\$550.00	\$68.00	\$0.00	\$0.00
4th-9th channel	EFNMG	\$550.00	\$64.00	\$0.00	\$0.00
10th channel & over	EFNNG	\$538.00	\$59.00	\$0.00	\$0.00
2.488 Gbps					
1st channel	EFNPG	\$775.00	\$68.00	\$0.00	\$0.00
2nd-3rd channel	EFNQG	\$550.00	\$68.00	\$0.00	\$0.00
4th-9th channel	EFNRG	\$550.00	\$64.00	\$0.00	\$0.00
10th-48th channel	EFNSG	\$538.00	\$59.00	\$0.00	\$0.00

DS3 - Optical - Per DS3 Channel - MA, NH, RI, VT

		MRC - Fixed	MRC - Per 1/4 Mile	NRC - First	NRC - Additional
135 Mbps	EFG6G	\$775.00	\$68.00	\$0.00	\$0.00
560 Mbps	EFG8G	\$775.00	\$68.00	\$0.00	\$0.00
2.488 Gbps	EFNPG	\$775.00	\$68.00	\$0.00	\$0.00

Tandem Switched Transport & Host/Remote Switched Transport

Local Transport Termination - Per Minute of Use

Massachusetts

Zone 1	\$0.000150
Zone 2	\$0.000150
Zone 3	\$0.000150

NY, CT

Zone 1	\$0.000150
Zone 2	\$0.000150
Zone 3	\$0.000150

MA, NH, RI, VT	\$0.000150
----------------	------------

Local Transport Facility - Per Mile, Per Minute

Massachusetts

Zone 1	\$0.000030
Zone 2	\$0.000030
Zone 3	\$0.000030

NY, CT

Zone 1	\$0.000030
Zone 2	\$0.000030
Zone 3	\$0.000030

MA, NH, RI, VT	\$0.000030
----------------	------------

Tandem Switching - Per Minute of Use

Massachusetts

Zone 1	\$0.000800
Zone 2	\$0.000800
Zone 3	\$0.000800

NY, CT

Zone 1	\$0.000800
Zone 2	\$0.000800
Zone 3	\$0.000800

MA, NH, RI, VT	\$0.000800
----------------	------------

Transport Multiplexing (DS3 to DS1) - Per Minute of Use

Massachusetts

Zone 1	\$0.000100
Zone 2	\$0.000100
Zone 3	\$0.000100

NY, CT

Zone 1	\$0.000100
Zone 2	\$0.000100
Zone 3	\$0.000100

MA, NH, RI, VT	\$0.000100
----------------	------------

Host/Remote Transport Termination - Per Minute of Use

Massachusetts

Zone 1	\$0.001419
Zone 2	\$0.001419
Zone 3	\$0.001419

NY, CT

Zone 1	\$0.001419
Zone 2	\$0.001419
Zone 3	\$0.001419

MA, NH, RI, VT	\$0.001419
----------------	------------

Host/Remote Transport Facility - Per Mile, Per Minute**Massachusetts**

Zone 1	\$0.000168
Zone 2	\$0.000168
Zone 3	\$0.000168

NY, CT

Zone 1	\$0.000168
Zone 2	\$0.000168
Zone 3	\$0.000168

MA, NH, RI, VT	\$0.000168
----------------	------------

Direct Trunked Transport**Channel Mileage****Voice Grade (Two-wire & Four-wire)**

	MRC - Fixed	MRC - Per Mile
1YTES	\$36.44	\$4.24

DS1**Massachusetts**

	MRC - Fixed	MRC - Per Mile
Zone 1	1YTCS	\$70.00
Zone 2	1YTCS	\$70.00
Zone 3	1YTCS	\$70.00

NY, CT

Zone 1	1YTCS	\$70.00
Zone 2	1YTCS	\$70.00
Zone 3	1YTCS	\$70.00

MA, NH, RI, VT	1YTCS	\$70.00
----------------	-------	---------

DS1**Massachusetts**

	MRC - Fixed	MRC - Per Mile
Zone 1	1YTDS	\$702.00
Zone 2	1YTDS	\$702.00
Zone 3	1YTDS	\$702.00

NY, CT

Zone 1	1YTDS	\$702.00
Zone 2	1YTDS	\$702.00
Zone 3	1YTDS	\$702.00

MA, NH, RI, VT	1YTDS	\$702.00	\$120.00
----------------	-------	----------	----------

Mid-Link

DS1

Massachusetts

NRC

Zone 1	NRBL1	\$150.00
Zone 2	NRBL1	\$150.00
Zone 3	NRBL1	\$150.00

NY, CT

Zone 1	NRBL1	\$150.00
Zone 2	NRBL1	\$150.00
Zone 3	NRBL1	\$150.00

MA, NH, RI, VT	NRBL1	\$150.00
----------------	-------	----------

DS1

Massachusetts

NRC

Zone 1	NRBL3	\$0.00
Zone 2	NRBL3	\$0.00
Zone 3	NRBL3	\$0.00

NY, CT

Zone 1	NRBL3	\$0.00
Zone 2	NRBL3	\$0.00
Zone 3	NRBL3	\$0.00

MA, NH, RI, VT	NRBL3	\$0.00
----------------	-------	--------

Interconnection Charge

Collocated

Premium Rate

Terminating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000000
Zone 2	\$0.003356
Zone 3	\$0.003356
All Other LATAs	\$0.003356

Originating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000000
Zone 2	\$0.007738
Zone 3	\$0.007738
All Other LATAs	\$0.007738

Transitional Rate

Terminating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000178
Zone 2	\$0.001688
Zone 3	\$0.001688
All Other LATAs	\$0.001688

Originating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000178
Zone 2	\$0.001688
Zone 3	\$0.001688
All Other LATAs	\$0.001688

Non Collocated

Premium Rate

Terminating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000396
Zone 2	\$0.003752
Zone 3	\$0.003752
All Other LATAs	\$0.003752

Originating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000396
Zone 2	\$0.008134
Zone 3	\$0.008134
All Other LATAs	\$0.008134

Transitional Rate

Terminating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000178
Zone 2	\$0.001688
Zone 3	\$0.001688
All Other LATAs	\$0.001688

Originating Per Access Minute Within New York Metro LATA

Zone 1	\$0.000178
Zone 2	\$0.001688
Zone 3	\$0.001688
All Other LATAs	\$0.001688

Optional Features

DS3 to DS1 Multiplexing - Per Arrangement

Massachusetts		MRC	NRC
Zone 1	MKW3X	\$615.60	\$0.00
Zone 2	MKW3X	\$649.80	\$0.00
Zone 3	MKW3X	\$684.00	\$0.00
NY, CT			
Zone 1	MKW3X	\$615.60	\$0.00
Zone 2	MKW3X	\$649.80	\$0.00
Zone 3	MKW3X	\$684.00	\$0.00
MA, NH, RI, VT	MKW3X	\$684.00	\$0.00

DS1 to Voice Multiplexing - Per Arrangement

Massachusetts		MRC	NRC
Zone 1	MKW1X	\$198.00	\$0.00

	Zone 2	MKW1X	\$209.00	\$0.00
	Zone 3	MKW1X	\$220.00	\$0.00
NY, CT				
	Zone 1	MKW1X	\$198.00	\$0.00
	Zone 2	MKW1X	\$209.00	\$0.00
	Zone 3	MKW1X	\$220.00	\$0.00
MA, NH, RI, VT		MKW1X	\$220.00	\$0.00

Service Rearrangement

Digital to Digital - Per Digital Interface Group Rearranged

Massachusetts		NRC	
	Zone 1	NRBOT	\$0.00
	Zone 2	NRBOT	\$0.00
	Zone 3	NRBOT	\$0.00
NY, CT			
	Zone 1	NRBOT	\$0.00
	Zone 2	NRBOT	\$0.00
	Zone 3	NRBOT	\$0.00
MA, NH, RI, VT		NRBOT	\$0.00

Per Trunk Rearranged - Tandem Routed to End Office Routed or End Office Routed to Tandem Routed

Massachusetts		NRC	
	Zone 1	NRBOK	\$0.00
	Zone 2	NRBOK	\$0.00
	Zone 3	NRBOK	\$0.00
NY, CT			
	Zone 1	NRBOK	\$0.00
	Zone 2	NRBOK	\$0.00
	Zone 3	NRBOK	\$0.00
MA, NH, RI, VT		NRBOK	\$0.00

Tandem Transport Type Rearrangement - Per Rearrangement

Massachusetts		NRC	
	Zone 1	NRBOV	\$0.00
	Zone 2	NRBOV	\$0.00
	Zone 3	NRBOV	\$0.00
NY, CT			
	Zone 1	NRBOV	\$0.00
	Zone 2	NRBOV	\$0.00
	Zone 3	NRBOV	\$0.00
MA, NH, RI, VT		NRBOV	\$0.00

Switched Facility Rearrangements - Per Rearrangement

Massachusetts		NRC	
	Zone 1	NRB06	\$0.00
	Zone 2	NRB06	\$0.00
	Zone 3	NRB06	\$0.00

NY, CT

Zone 1	NRB06	\$0.00
Zone 2	NRB06	\$0.00
Zone 3	NRB06	\$0.00

MA, NH, RI, VT	NRB06	\$0.00
----------------	-------	--------

**Interconnection Rearrangement to a Multiplexing Node or Virtual Collocation Arrangement
Per DS1 Entrance Facility Rearranged**

Massachusetts		MRC	NRC
Zone 1	NRBPC	None	\$0.00
Zone 2	NRBPC	None	\$0.00
Zone 3	NRBPC	None	\$0.00

NY, CT

Zone 1	NRBPC	None	\$284.59
Zone 2	NRBPC	None	\$0.00
Zone 3	NRBPC	None	\$0.00

MA, NH, RI, VT	NRBPC	None	\$0.00
----------------	-------	------	--------

**Interconnection Rearrangement to a Multiplexing Node or Virtual Collocation Arrangement
Per DS3 Entrance Facility Rearranged**

Massachusetts		MRC	NRC
Zone 1	NRBPC	None	\$0.00
Zone 2	NRBPC	None	\$0.00
Zone 3	NRBPC	None	\$0.00

NY, CT

Zone 1	NRBPC	None	\$407.37
Zone 2	NRBPC	None	\$0.00
Zone 3	NRBPC	None	\$0.00

MA, NH, RI, VT	NRBPC	None	\$0.00
----------------	-------	------	--------

**Interconnection Rearrangement from a Multiplexing Node or Virtual Collocation Arrangement
Per DS1 Entrance Facility Rearranged**

Massachusetts		MRC	NRC
Zone 1	NRBPD	None	\$0.00
Zone 2	NRBPD	None	\$0.00
Zone 3	NRBPD	None	\$0.00

NY, CT

Zone 1	NRBPD	None	\$0.00
Zone 2	NRBPD	None	\$0.00
Zone 3	NRBPD	None	\$0.00

MA, NH, RI, VT	NRBPD	None	\$0.00
----------------	-------	------	--------

**Interconnection Rearrangement from a Multiplexing Node or Virtual Collocation Arrangement
Per DS3 Entrance Facility Rearranged**

Massachusetts		MRC	NRC
Zone 1	NRBPD	None	\$0.00
Zone 2	NRBPD	None	\$0.00
Zone 3	NRBPD	None	\$0.00

NY, CT

Zone 1	NRBPD	None	\$0.00
Zone 2	NRBPD	None	\$0.00
Zone 3	NRBPD	None	\$0.00
MA, NH, RI, VT	NRBPD	None	\$0.00

Pacific Bell Pricing Information

Pacific Bell **Zone Pricing for California** **Interstate (Recurring)**

	Month-to-Month			1-year Term Payment Plan			3-year Term Payment Plan			5-year Term Payment Plan		
	USOC	Zone.1	Zone.2	Zone.3	USOC	Zone.1	Zone.2	Zone.3	USOC	Zone.1	Zone.2	Zone.3
Switched												
Entrance Facility												
Voice Grade (per point of termination)												
2 wire	TSWZX	\$ 28.700	\$ 28.700	\$ 28.000								
4 wire	TSWAX	\$ 41.400	\$ 41.400	\$ 41.400								
DS1 (per point of termination)	TMEBW	\$ 135.00	\$ 175.00	\$ 185.00								
DS3 (per point of termination)												
With Terminal Equipment	Z3J8BW	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	Z318BW	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	Z358BW	\$ 1,400.00	\$ 1,700.00	\$ 1,800.00
Without Terminal Equipment	Z0J8BW	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	Z018BW	\$ 1,850.00	\$ 1,850.00	\$ 1,850.00	Z058BW	\$ 1,130.00	\$ 1,130.00	\$ 1,180.00
DS3X12 (per point of termination)												
With Terminal Equipment	Z3J3BW	\$ 7,558.00	\$ 7,558.00	\$ 7,558.00	Z318BW	\$ 6,800.00	\$ 6,800.00	\$ 6,800.00	Z358BW	\$ 3,000.00	\$ 3,250.00	\$ 3,500.00
Without Terminal Equipment	Z0J3BW	\$ 4,858.00	\$ 4,858.00	\$ 4,858.00	Z018BW	\$ 4,053.00	\$ 4,053.00	\$ 4,053.00	Z058BW	\$ 1,800.00	\$ 1,700.00	\$ 1,800.00
DS3X12 (per point of termination)												
With Terminal Equipment												
Without Terminal Equipment												
Direct Trunked Transport												
Voice Grade (per channel)												
Fixed (over 0 miles)	1LSBW	\$ 6.50	\$ 6.50	\$ 6.50								
Per mile	1LSBW	\$ 1.44	\$ 1.41	\$ 1.42								
DS1												
Fixed (over 0 miles)	1LSBW	\$ 63.00	\$ 70.00	\$ 81.00								
Per mile	1LSBW	\$ 10.09	\$ 10.09	\$ 12.33								
DS3												
Fixed (over 0 miles)	1LSBW	\$ 500.00	\$ 550.00	\$ 550.00								
Per mile	1LSBW	\$ 39.33	\$ 41.00	\$ 41.00								
Multiplexing												
DS3 to DS1	MC38BW	\$ 325.00	\$ 350.00	\$ 375.00								
DS1 to VO	MC18BW	\$ 250.00	\$ 275.00	\$ 300.00								
Tandem Switched Termination												
Per Access Minute Over 0 miles		\$ 0.000154	\$ 0.000180	\$ 0.000176								
Per Access Minute FGA Over 0 miles		\$ 0.000136	\$ 0.000153	\$ 0.000166								
Tandem Switched Transport Facility												
Per Access Minute Over 0 miles		\$ 0.000028	\$ 0.000030	\$ 0.000032								
Per Access Minute FGA Over 0 miles		\$ 0.000014	\$ 0.000014	\$ 0.000014								
Tandem Switching												
Per Access Minute		\$ 0.000058	\$ 0.0001080	\$ 0.0001278								
Tandem-Switched Termination-Host-Remote												
Per Access Minute		\$ 0.002805	\$ 0.002805	\$ 0.002805								
Tandem-Transport Facility-Host-Remote												
Per Access Minute per mile		\$ 0.000080	\$ 0.000080	\$ 0.000080								
DA Tandem-Switched Termination												
Rate per Call		\$ 0.000075	\$ 0.000083	\$ 0.000093								
DA Tandem-Switched Facility												
Rate per Call per Mile		\$ 0.000018	\$ 0.000020	\$ 0.000022								
Directory Tandem-Switching												
Rate per Call		\$ 0.002098	\$ 0.002098	\$ 0.002098								
DA Tandem Mux												
		\$ 0.000109	\$ 0.000109	\$ 0.000109								
SPECIAL												
CHANNEL TERMINATION												
DS1	TMCS/TMELB	\$135.00	\$175.00	\$185.00								

Pacific Bell

Zone Pricing

Interstate (Recurring)

	Month-to-Month			1-year Term Payment Plan			3-year Term Payment Plan			5-year Term Payment Plan					
	USOC	Zone 1	Zone 2	Zone 3	Zone 1	Zone 2	Zone 3	USOC	Zone 1	Zone 2	Zone 3	USOC	Zone 1	Zone 2	Zone 3
DS3	Without Terminal Equipment	Z0M4+	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	Z0S4+	\$1,250.00	\$1,300.00	\$1,350.00	Z0S4+	\$1,000.00	\$1,100.00	\$1,150.00
	With Terminal Equipment	Z3M4+	\$2,500.00	\$2,500.00	\$2,500.00	\$2,400.00	\$2,400.00	Z3S4+	\$1,700.00	\$1,900.00	\$2,000.00	Z3S4+	\$1,389.00	\$1,576.00	\$1,716.00
DS3JC	Without Terminal Equipment	Z0M4+	\$4,850.00	\$4,850.00	\$4,849.00	\$4,053.00	\$4,053.00	Z0S4+	\$2,200.00	\$2,300.00	\$2,400.00	Z0S4+	\$1,500.00	\$1,600.00	\$1,700.00
	With Terminal Equipment	Z3M4+	\$7,550.00	\$7,550.00	\$7,549.00	\$6,989.00	\$6,989.00	Z3S4+	\$3,800.00	\$3,900.00	\$4,000.00	Z3S4+	\$2,800.00	\$3,050.00	\$3,400.00
DS3x12	Without Terminal Equipment	Z0M4+	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	Z0S4+	\$1,250.00	\$1,300.00	\$1,350.00	Z0S4+	\$1,000.00	\$1,100.00	\$1,150.00
	With Terminal Equipment	Z3M4+	\$2,500.00	\$2,500.00	\$2,500.00	\$2,400.00	\$2,400.00	Z3S4+	\$1,700.00	\$1,900.00	\$2,000.00	Z3S4+	\$1,389.00	\$1,576.00	\$1,716.00

CHANNEL MILEAGE

	Fixed Per Mile		Fixed Per Mile	
31	11.5	\$53.00	\$70.00	\$81.00
	11.5	\$10.00	\$10.00	\$12.33
33	11.50X	\$500.00	\$550.00	\$600.00
	11.50X	\$30.98	\$41.00	\$41.00

COMMON OPTIONS

<ul style="list-style-type: none"> • Multiplexing - DB1 to Voice/Digital 	<ul style="list-style-type: none"> • MQ1/MQ2 	<ul style="list-style-type: none"> • \$250.00 • \$275.00 	<ul style="list-style-type: none"> • \$300.00
<ul style="list-style-type: none"> • Multiplexing - DB3 to DB1 	<ul style="list-style-type: none"> • MQ3/MQ4 	<ul style="list-style-type: none"> • \$325.00 • \$350.00 	<ul style="list-style-type: none"> • \$375.00

Interstate (Non-Recruiting)

Switched

Entrance Facility

Votes Grade (per point of termination)

2 who

Installation/Change

First Channel

Additional Channel

3

Installation/Change

First Channel

Additional Channel

Fig. 1 (see next of text)

Cost (per point of termination)
Location of house

First DB:
Instrument Change

FILE DS1
Additional DS1

ADDRESS ONLY

D83 (near point of termination)

See Cost Point of Ownership	Rate
With Terminal Equipment	Rate

Category	With Terminal Equipment	Without Terminal Equipment	Rate
Category 1	100%	100%	100%
Category 2	100%	100%	100%
Category 3	100%	100%	100%
Category 4	100%	100%	100%
Category 5	100%	100%	100%
Category 6	100%	100%	100%
Category 7	100%	100%	100%
Category 8	100%	100%	100%
Category 9	100%	100%	100%
Category 10	100%	100%	100%
Category 11	100%	100%	100%
Category 12	100%	100%	100%
Category 13	100%	100%	100%
Category 14	100%	100%	100%
Category 15	100%	100%	100%
Category 16	100%	100%	100%
Category 17	100%	100%	100%
Category 18	100%	100%	100%
Category 19	100%	100%	100%
Category 20	100%	100%	100%
Category 21	100%	100%	100%
Category 22	100%	100%	100%
Category 23	100%	100%	100%
Category 24	100%	100%	100%
Category 25	100%	100%	100%
Category 26	100%	100%	100%
Category 27	100%	100%	100%
Category 28	100%	100%	100%
Category 29	100%	100%	100%
Category 30	100%	100%	100%
Category 31	100%	100%	100%
Category 32	100%	100%	100%
Category 33	100%	100%	100%
Category 34	100%	100%	100%
Category 35	100%	100%	100%
Category 36	100%	100%	100%
Category 37	100%	100%	100%
Category 38	100%	100%	100%
Category 39	100%	100%	100%
Category 40	100%	100%	100%
Category 41	100%	100%	100%
Category 42	100%	100%	100%
Category 43	100%	100%	100%
Category 44	100%	100%	100%
Category 45	100%	100%	100%
Category 46	100%	100%	100%
Category 47	100%	100%	100%
Category 48	100%	100%	100%
Category 49	100%	100%	100%
Category 50	100%	100%	100%
Category 51	100%	100%	100%
Category 52	100%	100%	100%
Category 53	100%	100%	100%
Category 54	100%	100%	100%
Category 55	100%	100%	100%
Category 56	100%	100%	100%
Category 57	100%	100%	100%
Category 58	100%	100%	100%
Category 59	100%	100%	100%
Category 60	100%	100%	100%
Category 61	100%	100%	100%
Category 62	100%	100%	100%
Category 63	100%	100%	100%
Category 64	100%	100%	100%
Category 65	100%	100%	100%
Category 66	100%	100%	100%
Category 67	100%	100%	100%
Category 68	100%	100%	100%
Category 69	100%	100%	100%
Category 70	100%	100%	100%
Category 71	100%	100%	100%
Category 72	100%	100%	100%
Category 73	100%	100%	100%
Category 74	100%	100%	100%
Category 75	100%	100%	100%
Category 76	100%	100%	100%
Category 77	100%	100%	100%
Category 78	100%	100%	100%
Category 79	100%	100%	100%
Category 80	100%	100%	100%
Category 81	100%	100%	100%
Category 82	100%	100%	100%
Category 83	100%	100%	100%
Category 84	100%	100%	100%
Category 85	100%	100%	100%
Category 86	100%	100%	100%
Category 87	100%	100%	100%
Category 88	100%	100%	100%
Category 89	100%	100%	100%
Category 90	100%	100%	100%
Category 91	100%	100%	100%
Category 92	100%	100%	100%

Abstract: *Staphylococcus aureus* and *Escherichia coli* were isolated from the feces of 100 healthy and 100 diarrheic calves. The isolates were tested for sensitivity to 12 antimicrobials. The isolates were also tested for the presence of *bla*_{TEM}, *bla*_{SHV}, *bla*_{CMX}, *bla*₁, *bla*₂, *bla*₃, *bla*₄, *bla*₅, *bla*₆, *bla*₇, *bla*₈, *bla*₉, *bla*₁₀, *bla*₁₁, *bla*₁₂, *bla*₁₃, *bla*₁₄, *bla*₁₅, *bla*₁₆, *bla*₁₇, *bla*₁₈, *bla*₁₉, *bla*₂₀, *bla*₂₁, *bla*₂₂, *bla*₂₃, *bla*₂₄, *bla*₂₅, *bla*₂₆, *bla*₂₇, *bla*₂₈, *bla*₂₉, *bla*₃₀, *bla*₃₁, *bla*₃₂, *bla*₃₃, *bla*₃₄, *bla*₃₅, *bla*₃₆, *bla*₃₇, *bla*₃₈, *bla*₃₉, *bla*₄₀, *bla*₄₁, *bla*₄₂, *bla*₄₃, *bla*₄₄, *bla*₄₅, *bla*₄₆, *bla*₄₇, *bla*₄₈, *bla*₄₉, *bla*₅₀, *bla*₅₁, *bla*₅₂, *bla*₅₃, *bla*₅₄, *bla*₅₅, *bla*₅₆, *bla*₅₇, *bla*₅₈, *bla*₅₉, *bla*₆₀, *bla*₆₁, *bla*₆₂, *bla*₆₃, *bla*₆₄, *bla*₆₅, *bla*₆₆, *bla*₆₇, *bla*₆₈, *bla*₆₉, *bla*₇₀, *bla*₇₁, *bla*₇₂, *bla*₇₃, *bla*₇₄, *bla*₇₅, *bla*₇₆, *bla*₇₇, *bla*₇₈, *bla*₇₉, *bla*₈₀, *bla*₈₁, *bla*₈₂, *bla*₈₃, *bla*₈₄, *bla*₈₅, *bla*₈₆, *bla*₈₇, *bla*₈₈, *bla*₈₉, *bla*₉₀, *bla*₉₁, *bla*₉₂, *bla*₉₃, *bla*₉₄, *bla*₉₅, *bla*₉₆, *bla*₉₇, *bla*₉₈, *bla*₉₉, *bla*₁₀₀, *bla*₁₀₁, *bla*₁₀₂, *bla*₁₀₃, *bla*₁₀₄, *bla*₁₀₅, *bla*₁₀₆, *bla*₁₀₇, *bla*₁₀₈, *bla*₁₀₉, *bla*₁₁₀, *bla*₁₁₁, *bla*₁₁₂, *bla*₁₁₃, *bla*₁₁₄, *bla*₁₁₅, *bla*₁₁₆, *bla*₁₁₇, *bla*₁₁₈, *bla*₁₁₉, *bla*₁₂₀, *bla*₁₂₁, *bla*₁₂₂, *bla*₁₂₃, *bla*₁₂₄, *bla*₁₂₅, *bla*₁₂₆, *bla*₁₂₇, *bla*₁₂₈, *bla*₁₂₉, *bla*₁₃₀, *bla*₁₃₁, *bla*₁₃₂, *bla*₁₃₃, *bla*₁₃₄, *bla*₁₃₅, *bla*₁₃₆, *bla*₁₃₇, *bla*₁₃₈, *bla*₁₃₉, *bla*₁₄₀, *bla*₁₄₁, *bla*₁₄₂, *bla*₁₄₃, *bla*₁₄₄, *bla*₁₄₅, *bla*₁₄₆, *bla*₁₄₇, *bla*₁₄₈, *bla*₁₄₉, *bla*₁₅₀, *bla*₁₅₁, *bla*₁₅₂, *bla*₁₅₃, *bla*₁₅₄, *bla*₁₅₅, *bla*₁₅₆, *bla*₁₅₇, *bla*₁₅₈, *bla*₁₅₉, *bla*₁₆₀, *bla*₁₆₁, *bla*₁₆₂, *bla*₁₆₃, *bla*₁₆₄, *bla*₁₆₅, *bla*₁₆₆, *bla*₁₆₇, *bla*₁₆₈, *bla*₁₆₉, *bla*₁₇₀, *bla*₁₇₁, *bla*₁₇₂, *bla*₁₇₃, *bla*₁₇₄, *bla*₁₇₅, *bla*₁₇₆, *bla*₁₇₇, *bla*₁₇₈, *bla*₁₇₉, *bla*₁₈₀, *bla*₁₈₁, *bla*₁₈₂, *bla*₁₈₃, *bla*₁₈₄, *bla*₁₈₅, *bla*₁₈₆, *bla*₁₈₇, *bla*₁₈₈, *bla*₁₈₉, *bla*₁₉₀, *bla*₁₉₁, *bla*₁₉₂, *bla*₁₉₃, *bla*₁₉₄, *bla*₁₉₅, *bla*₁₉₆, *bla*₁₉₇, *bla*₁₉₈, *bla*₁₉₉, *bla*₂₀₀, *bla*₂₀₁, *bla*₂₀₂, *bla*₂₀₃, *bla*₂₀₄, *bla*₂₀₅, *bla*₂₀₆, *bla*₂₀₇, *bla*₂₀₈, *bla*₂₀₉, *bla*₂₁₀, *bla*₂₁₁, *bla*₂₁₂, *bla*₂₁₃, *bla*₂₁₄, *bla*₂₁₅, *bla*₂₁₆, *bla*₂₁₇, *bla*₂₁₈, *bla*₂₁₉, *bla*₂₂₀, *bla*₂₂₁, *bla*₂₂₂, *bla*₂₂₃, *bla*₂₂₄, *bla*₂₂₅, *bla*₂₂₆, *bla*₂₂₇, *bla*₂₂₈, *bla*₂₂₉, *bla*₂₃₀, *bla*₂₃₁, *bla*₂₃₂, *bla*₂₃₃, *bla*₂₃₄, *bla*₂₃₅, *bla*₂₃₆, *bla*₂₃₇, *bla*₂₃₈, *bla*₂₃₉, *bla*₂₄₀, *bla*₂₄₁, *bla*₂₄₂, *bla*₂₄₃, *bla*₂₄₄, *bla*₂₄₅, *bla*₂₄₆, *bla*₂₄₇, *bla*₂₄₈, *bla*₂₄₉, *bla*₂₅₀, *bla*₂₅₁, *bla*₂₅₂, *bla*₂₅₃, *bla*₂₅₄, *bla*₂₅₅, *bla*₂₅₆, *bla*₂₅₇, *bla*₂₅₈, *bla*₂₅₉, *bla*₂₆₀, *bla*₂₆₁, *bla*₂₆₂, *bla*₂₆₃, *bla*₂₆₄, *bla*₂₆₅, *bla*₂₆₆, *bla*₂₆₇, *bla*₂₆₈, *bla*₂₆₉, *bla*₂₇₀, *bla*₂₇₁, *bla*₂₇₂,

D83x2 (per point of termination)

 With Terminal Equipment | Rate |

Without Terminal Equipment Rate

• • • • •

D83X12 (per point of termination)

With Terminal Equipment
Want Terminal Equipment

Without Terminal Equipment

Brooks!

WJ3605

Channel Termination

DS1 **Element** 1.0

First Addition of	Second Addition of	Third Addition of	Fourth Addition of	Fifth Addition of	Sixth Addition of	Seventh Addition of	Eighth Addition of	Ninth Addition of	Tenth Addition of	Eleventh Addition of	Twelfth Addition of	Thirteenth Addition of	Fourteenth Addition of	Fifteenth Addition of	Sixteenth Addition of	Seventeenth Addition of	Eighteenth Addition of	Nineteenth Addition of	Twentieth Addition of
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Additional

DS1

Without Equipment

INTERFACIAL POLYMERIZATION

Pacific Bell

Zone Pricing for California

Interstate (Recurring)

	Month-to-Month			1-year Term Payment Plan			3-year Term Payment Plan			5-year Term Payment Plan		
	USOC	Zona.1	Zona.2	USOC	Zona.1	Zona.2	USOC	Zona.1	Zona.2	USOC	Zona.1	Zona.2
With Equipment	Z3MA+	\$ 31,000.00	\$31,000.00	\$31,000.00	Z31A+	\$3,000.00	\$3,250.00	\$3,500.00	Z33A+	\$1,500.00	\$1,625.00	\$1,750.00
D63X3 Without Equipment	ZOMA+	\$ 43,200.00	\$43,200.00	\$43,200.00	Z01A+	\$4,000.00	\$4,500.00	\$5,000.00	Z03A+	\$2,000.00	\$2,250.00	\$2,500.00
With Equipment	Z3MA+	\$ 58,200.00	\$58,200.00	\$58,200.00	Z31A+	\$5,500.00	\$6,000.00	\$6,500.00	Z33A+	\$2,750.00	\$3,000.00	\$3,250.00
D63X12 Without Equipment									Z23A9	\$3,000.00	\$4,000.00	\$5,000.00
With Equipment									Z23AE	\$3,500.00	\$4,500.00	\$6,000.00
									Z25A9	\$8,000.00	\$8,000.00	\$10,000.00
									Z25AE	\$7,000.00	\$9,000.00	\$12,000.00

SBC Pricing Information

SWB Switched

(No zones for KS)

SAME**DIFFERENT**

EF-DS1 Monthly Rate	All \$165	MO 1 \$ 163.00 MO 2 \$ 165.00 MO 3 \$ 165.00	TX 1 \$ 162.00 TX 2 \$ 162.00 TX 3 \$ 165.00	
EF-DS3	All same			
DTT-DS1 Fixed Monthly Rate (0 miles)	All \$6.04	TX 1 \$ 5.75 TX 2 \$ 5.90 TX 3 \$ 6.04		
DTT-DS1 Fixed Monthly Rate (>0 miles)	All same			
DTT-DS1 Per Mile Monthly Rate (0 miles)	All same			
DTT-DS1 Per Mile Monthly Rate (>0 miles)	All \$16.80	TX 1 \$ 13.78 TX 2 \$ 13.78 TX 3 \$ 13.78		
DTT-DS3 Fixed Monthly Rate	All \$815.00	AR 1 \$ 815.00 AR 2 \$ 717.20 AR 3 \$ 815.00	MO 1 \$ 815.00 MO 2 \$ 717.20 MO 3 \$ 815.00	OK 1 \$ 815.00 OK 2 \$ 717.20 OK 3 \$ 815.00
DTT-DS3 Per Mile Monthly Rate	All same			

SWB SPECIAL**SAME****DIFFERENT**

CT-DS1 Monthly Rate	All \$165.00	MO 1 \$ 163.00	TX 1 \$ 162.00	
		MO 2 \$ 165.00	TX 2 \$ 162.00	
		MO 3 \$ 165.00	TX 3 \$ 165.00	
CM-DS1 Fixed Monthly Rate	All same			
CM-DS1 Per Mile Monthly Rate	All same			
Mux DS1-DS0 Monthly Rate	All same			
Mux DS1-Voice Monthly Rate	All same			
CT-DS1 HC-TPP Rate 3 year	All \$140.25	MO 1 \$ 129.60	TX 1 \$ 121.50	
		MO 2 \$ 129.60	TX 2 \$ 121.50	
		MO 3 \$ 140.25	TX 3 \$ 140.25	
CM-DS1 Fixed HC-TPP Rate 3 year	All \$46.00	MO 1 \$ 42.50	TX 1 \$ 40.00	
		MO 2 \$ 42.50	TX 2 \$ 40.00	
		MO 3 \$ 46.00	TX 3 \$ 46.00	
CM-DS1 Per Mile HC-TPP Rate 3 year	All \$14.28	MO 1 \$ 13.44	TX 1 \$ 12.60	
		MO 2 \$ 13.44	TX 2 \$ 12.60	
		MO 3 \$ 14.28	TX 3 \$ 14.28	
Mux DS1-DS0 3 year	All same			
Mux DS1-Voice 3 year	All same			
CT-DS1 HC-TPP Rate 5 year	All \$132.00	MO 1 \$ 121.50	TX 1 \$ 108.00	
		MO 2 \$ 121.50	TX 2 \$ 108.00	
		MO 3 \$ 132.00	TX 3 \$ 132.00	
CM-DS1 Fixed HC-TPP Rate 5 year	All \$43.50	MO 1 \$ 40.00	TX 1 \$ 37.50	
		MO 2 \$ 40.00	TX 2 \$ 37.50	
		MO 3 \$ 43.50	TX 3 \$ 43.50	
CM-DS1 Per Mile HC-TPP Rate 5 year	All \$13.44	MO 1 \$ 12.60	TX 1 \$ 11.20	
		MO 2 \$ 12.60	TX 2 \$ 11.20	
		MO 3 \$ 13.44	TX 3 \$ 13.44	
Mux DS1-DS0 5 year	All same			
Mux DS1-Voice 5 year	All same			
CT-DS3 Megalink Custom Electrical/All term	All same			
CT-DS3 Megalink Custom Optical/All terms	All same			
CT-Temporary DS3	All same			

CM-DS3 Fixed	All same								
CM-Temporary DS3	All same								
CM-DS3 Per Mile Monthly Rate	All zones/1pk=\$118	TX 1/1pk	\$ 118.00	TX 1/3pk	\$ 151.80	TX 1/6pk	\$ 217.12	TX 1/12pk	\$ 303.60
	All zones/3pk=\$165	TX 2/1pk	\$ 94.40	TX 2/3pk	\$ 132.00	TX 2/6pk	\$ 188.80	TX 2/12pk	\$ 264.00
	All zones/6pk=\$236	TX 3/1pk	\$ 88.50	TX 3/3pk	\$ 123.75	TX 3/6pk	\$ 177.00	TX 3/12pk	\$ 247.50
	All zones/12pk=\$330								
CM-DS3 Per Mile 3 year	All zones/1pk=\$85	MO 1/1pk	\$ 80.00	MO 1/3pk	\$ 112.00	MO 1/6pk	\$ 161.00	MO 1/12p	\$ 225.00
	All zones/3pk=\$119	MO 2/1pk	\$ 80.00	MO 2/3pk	\$ 112.00	MO 2/6pk	\$ 161.00	MO 2/12p	\$ 225.00
	All zones/6pk=\$171	MO 3/1pk	\$ 85.00	MO 3/3pk	\$ 119.00	MO 3/6pk	\$ 171.00	MO 3/12p	\$ 239.00
	All zones/12pk=\$239	TX 1/1pk	\$ 80.00	TX 1/3pk	\$ 103.04	TX 1/6pk	\$ 148.12	TX 1/12pk	\$ 207.00
		TX 2/1pk	\$ 64.00	TX 2/3pk	\$ 89.60	TX 2/6pk	\$ 128.80	TX 2/12pk	\$ 180.00
		TX 3/1pk	\$ 63.75	TX 3/3pk	\$ 89.25	TX 3/6pk	\$ 128.25	TX 3/12pk	\$ 179.25
CM-DS3 Per Mile 5 year	All zones/1pk=\$75	TX 1/1pk	\$ 69.00	TX 1/3pk	\$ 97.52	TX 1/6pk	\$ 138.92	TX 1/12pk	\$ 194.12
	All zones/3pk=\$106	TX 2/1pk	\$ 60.00	TX 2/3pk	\$ 84.80	TX 2/6pk	\$ 120.80	TX 2/12pk	\$ 168.80
	All zones/6pk=\$151	TX 3/1pk	\$ 56.25	TX 3/3pk	\$ 79.50	TX 3/6pk	\$ 113.25	TX 3/12pk	\$ 158.25
	All zones/12pk=\$211								
CM-DS3 Per Mile 10 year	All zones/1pk=\$71	TX 1/1pk	\$ 65.32	TX 1/3pk	\$ 91.08	TX 1/6pk	\$ 130.64	TX 1/12pk	\$ 182.16
	All zones/3pk=\$99	TX 2/1pk	\$ 56.80	TX 2/3pk	\$ 79.20	TX 2/6pk	\$ 113.60	TX 2/12pk	\$ 158.40
	All zones/6pk=\$142	TX 3/1pk	\$ 53.25	TX 3/3pk	\$ 74.25	TX 3/6pk	\$ 106.50	TX 3/12pk	\$ 148.50
	All zones/12pk=\$198								
MUX-DS3 Monthly Rate	All \$815.00	TX 1	\$ 749.80						
		TX 2	\$ 815.00						
		TX 3	\$ 815.00						
MUX-DS3 3 year	All \$686.40	TX 1	\$ 631.49						
		TX 2	\$ 686.40						
		TX 3	\$ 686.40						
MUX-DS3 5 year	All \$580.00	TX 1	\$ 533.60						
		TX 2	\$ 580.00						
		TX 3	\$ 580.00						
MUX-DS3 10 year	All \$580.00	TX 1	\$ 533.60						
		TX 2	\$ 580.00						
		TX 3	\$ 580.00						

USW Pricing Information

US WEST INTERSTATE RATES

DS1 Service

NOTE: Zone pricing is applicable in the following states: AZ, CO, IA, MN, NE, NM, OR, UT, WA

Local Channel Term, per point of termination

		USOC	Non-Plan	Month to Month	36 Months	60 Months
DS1 (1.544 Mbps)						
Monthly Rate						
	Non-Plan	TMECS		\$125.00	\$115.00	\$100.00
	Zone 1	TMECS		115.00	105.00	92.00
	Zone 2	TMECS		125.00	115.00	100.00
	Zone 3	TMECS		135.00	125.00	108.00

Between two different
1.544 Mbps not installed
as one service:

	Monthly CU5BD	36 Months CU5CD	60 Months CU5DD
NonPlan	\$10.00	\$9.20	\$8.00
Zone 1	10.00	9.20	8.00
Zone 2	10.00	9.20	8.00
Zone 3	10.00	9.20	8.00

Multiplexing
DS1 to DS0:

		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	QMU	\$250.00	\$250.00	\$250.00	\$250.00
36 Months	MKJ3X	\$230.00	\$230.00	\$230.00	\$230.00
Vintage 2		\$200.93	\$200.93	\$200.93	\$200.93
60 Months	MKJ6X	\$200.00	\$200.00	\$200.00	\$200.00
Vintage 2		\$174.72	\$174.72	\$174.72	\$174.72

Vintage 2 in effect 8/1/95 through 6/30/98

Private Line DS1 Cross Connect	TYLDA	\$17.22
Switched DS1 Cross Connect	TYLFA	\$17.22

Transport Channels-Mileage

1. 1.544 Mbps

a. Monthly

		Monthly Rate			
Mileage Band	USOC	Non-Plan	Zone 1	Zone 2	Zone 3

0 1 U5C 1

c. 60 Months

		Monthly Rate			
Mileage Band	USOC	Non-Plan	Zone 1	Zone 2	Zone 3

0 1 U5E 1

Fixed Per Mile	-	-	-	-	-
-1over 0 to 8 1 USC 2					
Fixed Per Mile	\$86.50	\$86.50	\$86.50	\$86.50	\$86.50
	\$13.55	\$13.55	\$13.55	\$13.55	\$13.55
-Over 8 to 25 1 USC 3					
Fixed Per Mile	\$109.85	\$109.85	\$109.85	\$109.85	\$109.85
	\$14.19	\$14.19	\$14.19	\$14.19	\$14.19
-Over 25 to 50 1 USC 4					
Fixed Per Mile	\$116.35	\$116.35	\$116.35	\$116.35	\$116.35
	\$14.51	\$14.51	\$14.51	\$14.51	\$14.51
-Over 50 1 USC 5					
Fixed Per Mile	\$127.99	\$127.99	\$127.99	\$127.99	\$127.99
	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02

Fixed Per Mile	-	-	-	-	-
-over 0 to 8 1 USE 2					
Fixed Per Mile	\$69.20	\$69.20	\$69.20	\$69.20	\$69.20
	\$10.84	\$10.84	\$10.84	\$10.84	\$10.84
-Over 8 to 25 1 USE 3					
Fixed Per Mile	\$87.88	\$87.88	\$87.88	\$87.88	\$87.88
	\$11.35	\$11.35	\$11.35	\$11.35	\$11.35
-Over 25 to 50 1 USE 4					
Fixed Per Mile	\$93.08	\$93.08	\$93.08	\$93.08	\$93.08
	\$11.61	\$11.61	\$11.61	\$11.61	\$11.61
-Over 50 1 USE 5					
Fixed Per Mile	\$102.39	\$102.39	\$102.39	\$102.39	\$102.39
	\$12.01	\$12.01	\$12.01	\$12.01	\$12.01

b. 36 Months

Mileage Band	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
0 1 USD 1					
Fixed Per Mile	-	-	-	-	-
-1over 0 to 8 1 USD 2					
Fixed Per Mile	\$77.85	\$77.85	\$77.85	\$77.85	\$77.85
	\$12.20	\$12.20	\$12.20	\$12.20	\$12.20
-Over 8 to 25 1 USD 3					
Fixed Per Mile	\$98.88	\$98.88	\$98.88	\$98.88	\$98.88
	\$12.77	\$12.77	\$12.77	\$12.77	\$12.77
-Over 25 to 50 1 USD 4					
Fixed Per Mile	\$104.72	\$104.72	\$104.72	\$104.72	\$104.72
	\$13.06	\$13.06	\$13.06	\$13.06	\$13.06
-Over 50 1 USD 5					
Fixed Per Mile	\$115.19	\$115.19	\$115.19	\$115.19	\$115.19
	\$13.52	\$13.52	\$13.52	\$13.52	\$13.52

Entrance Facility

		Non-Plan	Zone 1	Zone 2	Zone 3
DS1 - Electrical Interface					
-Monthly EF2BX		\$125.00	\$115.00	\$125.00	\$135.00
-36 Mos. EF2BX		N/A	\$105.00	\$115.00	\$125.00
Vintage 2					\$109.01
-60 Mos. EF2BX		N/A	\$92.00	\$100.00	\$108.00

Vintage 3
 Vintage 2 in effect 7/5/96 through 10/18/98
 Vintage 3 in effect 6/5/96 through 6/30/98

\$95.00

Direct-Trunked Transport

DS 1	Non-Plan	Zone 1	Zone 2	Zone 3
*Mileage Bands - Fixed				
- 0 1YTXA	N/A	N/A	N/A	N/A
- Over 0 to 8 1YTXB	\$86.50	\$86.50	\$86.50	\$86.50
- Over 8 to 25 1YTXC	\$109.85	\$109.85	\$109.85	\$109.85
- Over 25 to 50 1YTXD	\$116.35	\$116.35	\$116.35	\$116.35
- Over 50 1YTXE	\$127.99	\$127.99	\$127.99	\$127.99
*Mileage Bands - Per Mile				
- 0 1YTXA	N/A	N/A	N/A	N/A
- Over 0 to 8 1YTXB	\$13.55	\$13.55	\$13.55	\$13.55
- Over 8 to 25 1YTXC	\$14.19	\$14.19	\$14.19	\$14.19
- Over 25 to 50 1YTXD	\$14.51	\$14.51	\$14.51	\$14.51
- Over 50 1YTXE	\$15.02	\$15.02	\$15.02	\$15.02
Multiplexing				
DS1 to VG MKW1X	\$250.00	\$250.00	\$250.00	\$250.00
DS1 to VG M6W1X	\$250.00	\$250.00	\$250.00	\$250.00

DS3 Service

NOTE: Zone pricing is applicable in the following states: AZ, CO, IA, MN, NE, NM, OR, UT, WA

Channel Termination, per point of Termination Electrical Interface

Capacity of 1:	USOC	Non-Plan	Monthly Rate Zone 1	Zone 2	Zone 3
Monthly	THJAX	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
12 Months	HDJNX	\$1,455.00	\$1,455.00	\$1,455.00	\$1,455.00
Vintage 5		\$1,310.00	\$1,310.00	\$1,310.00	\$1,310.00
24 Months	HDJOX	\$1,425.00	\$1,425.00	\$1,425.00	\$1,425.00
Vintage 2					\$1,222.00
Vintage 5		\$1,269.00	\$1,269.00	\$1,269.00	\$1,269.00
36 Months	THFBX	\$1,350.00	\$1,350.00	\$1,350.00	\$1,350.00
Vintage 3					\$1,158.93
Vintage 2					\$1,170.00
Vintage 5		\$1,215.00	\$1,215.00	\$1,215.00	\$1,215.00
60 Months	THJCX	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00
Vintage 3					\$1,030.16

Capacity of 9: USOC	Non-Plan	Monthly Rate Zone 1	Zone 2	Zone 3
Monthly THJVX	\$6,582.00	\$6,582.00	\$6,582.00	\$6,582.00
-per DS3 TH5VX	\$81.00	\$81.00	\$81.00	\$81.00
12 Months HDJTX	\$6,385.00	\$6,385.00	\$6,385.00	\$6,385.00
-per DS3 HD5TX	\$79.00	\$79.00	\$79.00	\$79.00
24 Months HDJUX	\$6,187.00	\$6,187.00	\$6,187.00	\$6,187.00
-per DS3 HD5UX	\$76.00	\$76.00	\$76.00	\$76.00
36 Months THJWX	\$5,923.00	\$5,923.00	\$5,923.00	\$5,923.00
-per DS3 TH5WX	\$73.00	\$73.00	\$73.00	\$73.00
60 Months THJYX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3 TH5YX	\$67.00	\$67.00	\$67.00	\$67.00
120 Month THJZX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3 TH5ZX	\$67.00	\$67.00	\$67.00	\$67.00

Capacity of 12 USOC	Non-Plan	Monthly Rate Zone 1	Zone 2	Zone 3
---------------------	----------	------------------------	--------	--------

Vintage 2					\$1,040.00
Vintage 5		\$1,080.00	\$1,080.00	\$1,080.00	\$1,080.00
120 Months THJDX		\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00
Vintage 3					\$901.39
Vintage 4					\$945.00
Vintage 2					\$1,040.00
Vintage 5		\$1,080.00	\$1,080.00	\$1,080.00	\$1,080.00

Vintage 2 in effect 7/2/93 through 6/30/94
 Vintage 3 in effect 1/1/91 through 3/27/91
 Vintage 4 in effect 7/1/92 through 7/1/93
 Vintage 5 in effect 7/1/94 through 6/30/98

Capacity of 2: USOC		Non-Plan	Monthly Rate		
			Zone 1	Zone 2	Zone 3
Monthly	THJEX	\$1,936.00	\$1,936.00	\$1,936.00	\$1,936.00
-per DS3	TH5EX	\$160.00	\$160.00	\$160.00	\$160.00
12 Months	HDJPX	\$1,878.00	\$1,878.00	\$1,878.00	\$1,878.00
-per DS3	HD5PX	\$155.00	\$155.00	\$155.00	\$155.00
24 Months	HDJQX	\$1,820.00	\$1,820.00	\$1,820.00	\$1,820.00
-per DS3	HD5QX	\$150.00	\$150.00	\$150.00	\$150.00
36 Months	THJFX	\$1,742.00	\$1,742.00	\$1,742.00	\$1,742.00
-per DS3	TH5FX	\$144.00	\$144.00	\$144.00	\$144.00
60 Months	THJGX	\$1,549.00	\$1,549.00	\$1,549.00	\$1,549.00
-per DS3	TH5GX	\$128.00	\$128.00	\$128.00	\$128.00
120 Months	TH5GX	\$1,549.00	\$1,549.00	\$1,549.00	\$1,549.00
-per DS3	THJHX	\$128.00	\$128.00	\$128.00	\$128.00

Capacity of 3: USOC		Non-Plan	Monthly Rate		
			Zone 1	Zone 2	Zone 3
Monthly	THJJX	\$2,295.00	\$2,295.00	\$2,295.00	\$2,295.00
-per DS3	TH5JX	\$133.00	\$133.00	\$133.00	\$133.00
12 Months	HDJRX	\$2,227.00	\$2,227.00	\$2,227.00	\$2,227.00
-per DS3	HD5RX	\$129.00	\$129.00	\$129.00	\$129.00
24 Months	HDJSX	\$2,157.00	\$2,157.00	\$2,157.00	\$2,157.00
-per DS3	HD5SX	\$125.00	\$125.00	\$125.00	\$125.00
36 Months	THJKX	\$2,066.00	\$2,066.00	\$2,066.00	\$2,066.00
-per DS3	TH5KX	\$120.00	\$120.00	\$120.00	\$120.00
60 Months	THJLX	\$1,836.00	\$1,836.00	\$1,836.00	\$1,836.00
-per DS3	TH5LX	\$106.00	\$106.00	\$106.00	\$106.00
120 Months	THJMX	\$1,836.00	\$1,836.00	\$1,836.00	\$1,836.00
-per DS3	TH5MX	\$106.00	\$106.00	\$106.00	\$106.00

Capacity of 6: USOC		Non-Plan	Monthly Rate		
			Zone 1	Zone 2	Zone 3
Monthly	HDJAX	\$6,582.00	\$6,582.00	\$6,582.00	\$6,582.00
-per DS3	HD5AX	\$81.00	\$81.00	\$81.00	\$81.00

Monthly	THJNX	\$6,582.00	\$6,582.00	\$6,582.00	\$6,582.00
-per DS3	TH5NX	\$81.00	\$81.00	\$81.00	\$81.00
12 Months	HDJVX	\$6,385.00	\$6,385.00	\$6,385.00	\$6,385.00
-per DS3	HD5VX	\$79.00	\$79.00	\$79.00	\$79.00
24 Months	HDJWX	\$6,187.00	\$6,187.00	\$6,187.00	\$6,187.00
-per DS3	HD5WX	\$76.00	\$76.00	\$76.00	\$76.00
36 Months	THJOX	\$5,923.00	\$5,923.00	\$5,923.00	\$5,923.00
-per DS3	TH5OX	\$73.00	\$73.00	\$73.00	\$73.00
60 Months	THJPX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3	TH5PX	\$67.00	\$67.00	\$67.00	\$67.00
120 Month	THJQX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3	TH5QX	\$67.00	\$67.00	\$67.00	\$67.00

Capacity of 24 USOC		Non-Plan	Monthly Rate		
			Zone 1	Zone 2	Zone 3
Monthly	THJRX	\$12,850.00	\$12,850.00	\$12,850.00	\$12,850.00
-per DS3	THJRX	\$87.00	\$87.00	\$87.00	\$87.00
12 Months	HDJ1X	\$12,465.00	\$12,465.00	\$12,465.00	\$12,465.00
-per DS3	HD51X	\$84.00	\$84.00	\$84.00	\$84.00
24 Months	HDJ2X	\$12,079.00	\$12,079.00	\$12,079.00	\$12,079.00
-per DS3	HD52X	\$82.00	\$82.00	\$82.00	\$82.00
36 Months	THJSX	\$11,565.00	\$11,565.00	\$11,565.00	\$11,565.00
-per DS3	TH5SX	\$79.00	\$79.00	\$79.00	\$79.00
60 Months	THJTX	\$10,280.00	\$10,280.00	\$10,280.00	\$10,280.00
-per DS3	TH5TX	\$70.00	\$70.00	\$70.00	\$70.00
120 Month	THJUX	\$10,280.00	\$10,280.00	\$10,280.00	\$10,280.00
-per DS3	TH5UX	\$70.00	\$70.00	\$70.00	\$70.00

Capacity of 36 USOC		Non-Plan	Monthly Rate		
			Zone 1	Zone 2	Zone 3
Monthly	HDJGX	\$21,883.00	\$21,883.00	\$21,883.00	\$21,883.00
-per DS3	HD5GX	\$97.00	\$97.00	\$97.00	\$97.00
12 Months	HDJHX	\$21,212.00	\$21,212.00	\$21,212.00	\$21,212.00
-per DS3	HD5HX	\$94.00	\$94.00	\$94.00	\$94.00
24 Months	HDJJX	\$20,539.00	\$20,539.00	\$20,539.00	\$20,539.00
-per DS3	HD5JX	\$91.00	\$91.00	\$91.00	\$91.00
36 Months	HDJKX	\$19,675.00	\$19,675.00	\$19,675.00	\$19,675.00
-per DS3	HD5KX	\$87.00	\$87.00	\$87.00	\$87.00
60 Months	HDJLX	\$17,515.00	\$17,515.00	\$17,515.00	\$17,515.00
-per DS3	HD5LX	\$78.00	\$78.00	\$78.00	\$78.00
120 Month	HDJMX	\$17,515.00	\$17,515.00	\$17,515.00	\$17,515.00
-per DS3	HD5MX	\$78.00	\$78.00	\$78.00	\$78.00

12 Months	HDJBX	\$6,385.00	\$6,385.00	\$6,385.00	\$6,385.00
-per DS3	HD5BX	\$79.00	\$79.00	\$79.00	\$79.00
24 Months	HDJCX	\$6,187.00	\$6,187.00	\$6,187.00	\$6,187.00
-per DS3	HD5CX	\$76.00	\$76.00	\$76.00	\$76.00
36 Months	HDJDX	\$5,923.00	\$5,923.00	\$5,923.00	\$5,923.00
-per DS3	HD5DX	\$73.00	\$73.00	\$73.00	\$73.00
60 Months	HDJEX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3	HD5EX	\$67.00	\$67.00	\$67.00	\$67.00
120 Months	HDJFX	\$5,265.00	\$5,265.00	\$5,265.00	\$5,265.00
-per DS3	HD5FX	\$67.00	\$67.00	\$67.00	\$67.00

Optical Interface
Channel Termination, per point of Termination

Capacity of 2:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH2EX	\$1,747.00	\$1,747.00	\$1,747.00	\$1,747.00
-per DS3	TH8EX	\$70.00	\$70.00	\$70.00	\$70.00
12 Months	HD2PX	\$1,695.00	\$1,695.00	\$1,695.00	\$1,695.00
-per DS3	HD8PX	\$68.00	\$68.00	\$68.00	\$68.00
24 Months	HD2QX	\$1,642.00	\$1,642.00	\$1,642.00	\$1,642.00
-per DS3	HD8QX	\$66.00	\$66.00	\$66.00	\$66.00
36 Months	TH2FX	\$1,572.00	\$1,572.00	\$1,572.00	\$1,572.00
-per DS3	TH8FX	\$63.00	\$63.00	\$63.00	\$63.00
60 Months	TH2GX	\$1,398.00	\$1,398.00	\$1,398.00	\$1,398.00
-per DS3	TH8GX	\$56.00	\$56.00	\$56.00	\$56.00
120 Months	TH2HX	\$1,398.00	\$1,398.00	\$1,398.00	\$1,398.00
-per DS3	TH8HX	\$56.00	\$56.00	\$56.00	\$56.00

Capacity of 3:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH2JX	\$1,747.00	\$1,747.00	\$1,747.00	\$1,747.00
-per DS3	TH8JX	\$70.00	\$70.00	\$70.00	\$70.00
12 Months	HD2RX	\$1,695.00	\$1,695.00	\$1,695.00	\$1,695.00
-per DS3	HD8RX	\$68.00	\$68.00	\$68.00	\$68.00
24 Months	HD2SX	\$1,642.00	\$1,642.00	\$1,642.00	\$1,642.00
-per DS3	HD8SX	\$66.00	\$66.00	\$66.00	\$66.00
36 Months	TH2KX	\$1,572.00	\$1,572.00	\$1,572.00	\$1,572.00
-per DS3	TH8KX	\$63.00	\$63.00	\$63.00	\$63.00
60 Months	TH2LX	\$1,398.00	\$1,398.00	\$1,398.00	\$1,398.00
-per DS3	TH8LX	\$56.00	\$56.00	\$56.00	\$56.00
120 Months	TH2MX	\$1,398.00	\$1,398.00	\$1,398.00	\$1,398.00
-per DS3	TH8MX	\$56.00	\$56.00	\$56.00	\$56.00

Capacity of 6:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	HD2AX	\$3,691.00	\$3,691.00	\$3,691.00	\$3,691.00
-per DS3	HD8AX	\$40.00	\$40.00	\$40.00	\$40.00
12 Months	HD2BX	\$3,581.00	\$3,581.00	\$3,581.00	\$3,581.00
-per DS3	HD8BX	\$39.00	\$39.00	\$39.00	\$39.00

Capacity of 12:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH2NX	\$3,691.00	\$3,691.00	\$3,691.00	\$3,691.00
-per DS3	TH8NX	\$40.00	\$40.00	\$40.00	\$40.00
12 Months	HD2VX	\$3,581.00	\$3,581.00	\$3,581.00	\$3,581.00
-per DS3	HD8VX	\$39.00	\$39.00	\$39.00	\$39.00
24 Months	HD2WX	\$3,469.00	\$3,469.00	\$3,469.00	\$3,469.00
-per DS3	HD8WX	\$38.00	\$38.00	\$38.00	\$38.00
36 Months	TH2OX	\$3,321.00	\$3,321.00	\$3,321.00	\$3,321.00
-per DS3	TH8OX	\$36.00	\$36.00	\$36.00	\$36.00
60 Months	TH2PX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	TH8PX	\$34.00	\$34.00	\$34.00	\$34.00
120 Months	TH2QX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	TH8QX	\$34.00	\$34.00	\$34.00	\$34.00

Capacity of 18:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH21X	\$7,250.00	\$7,250.00	\$7,250.00	\$7,250.00
-per DS3	TH81X	\$52.00	\$52.00	\$52.00	\$52.00
12 Months	HD2YX	\$7,033.00	\$7,033.00	\$7,033.00	\$7,033.00
-per DS3	HD8YX	\$50.00	\$50.00	\$50.00	\$50.00
24 Months	HD2ZX	\$6,815.00	\$6,815.00	\$6,815.00	\$6,815.00
-per DS3	HD8ZX	\$49.00	\$49.00	\$49.00	\$49.00
36 Months	TH22X	\$6,525.00	\$6,525.00	\$6,525.00	\$6,525.00
-per DS3	TH82X	\$47.00	\$47.00	\$47.00	\$47.00
60 Months	TH23X	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00
-per DS3	TH83X	\$42.00	\$42.00	\$42.00	\$42.00
120 Months	TH24X	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00
-per DS3	TH84X	\$42.00	\$42.00	\$42.00	\$42.00

Capacity of 24:		Monthly Rate			
USOC		Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH2RX	\$7,250.00	\$7,250.00	\$7,250.00	\$7,250.00
-per DS3	TH8RX	\$52.00	\$52.00	\$52.00	\$52.00
12 Months	HD21X	\$7,033.00	\$7,033.00	\$7,033.00	\$7,033.00
-per DS3	HD81X	\$50.00	\$50.00	\$50.00	\$50.00

24 Months	HD2CX	\$3,469.00	\$3,469.00	\$3,469.00	\$3,469.00
-per DS3	HD8CX	\$38.00	\$38.00	\$38.00	\$38.00
36 Months	HD2DX	\$3,321.00	\$3,321.00	\$3,321.00	\$3,321.00
-per DS3	HD8DX	\$36.00	\$36.00	\$36.00	\$36.00
60 Months	HD2EX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	HD8EX	\$34.00	\$34.00	\$34.00	\$34.00
120 Months	HD2FX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	HD8FX	\$34.00	\$34.00	\$34.00	\$34.00

24 Months	HD22X	\$6,815.00	\$6,815.00	\$6,815.00	\$6,815.00
-per DS3	HD82X	\$49.00	\$49.00	\$49.00	\$49.00
36 Months	TH2SX	\$6,525.00	\$6,525.00	\$6,525.00	\$6,525.00
-per DS3	TH8SX	\$47.00	\$47.00	\$47.00	\$47.00
60 Months	TH2TX	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00
-per DS3	TH8TX	\$42.00	\$42.00	\$42.00	\$42.00
120 Months	TH2UX	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00
-per DS3	TH8UX	\$42.00	\$42.00	\$42.00	\$42.00

		Monthly Rate			
Capacity of 9:	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	TH2VX	\$3,691.00	\$3,691.00	\$3,691.00	\$3,691.00
-per DS3	TH8VX	\$40.00	\$40.00	\$40.00	\$40.00
12 Months	HD2TX	\$3,581.00	\$3,581.00	\$3,581.00	\$3,581.00
-per DS3	HD8TX	\$39.00	\$39.00	\$39.00	\$39.00
24 Months	HD2UX	\$3,469.00	\$3,469.00	\$3,469.00	\$3,469.00
-per DS3	HD8UX	\$38.00	\$38.00	\$38.00	\$38.00
36 Months	TH2WX	\$3,321.00	\$3,321.00	\$3,321.00	\$3,321.00
-per DS3	TH8WX	\$36.00	\$36.00	\$36.00	\$36.00
60 Months	TH2YX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	TH8YX	\$34.00	\$34.00	\$34.00	\$34.00
120 Months	TH2ZX	\$2,952.00	\$2,952.00	\$2,952.00	\$2,952.00
-per DS3	TH8ZX	\$34.00	\$34.00	\$34.00	\$34.00

		Monthly Rate			
Capacity of 36:	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	HD2GX	\$11,659.00	\$11,659.00	\$11,659.00	\$11,659.00
-per DS3	HD8GX	\$69.00	\$69.00	\$69.00	\$69.00
12 Months	HD2HX	\$11,324.00	\$11,324.00	\$11,324.00	\$11,324.00
-per DS3	HD8HX	\$67.00	\$67.00	\$67.00	\$67.00
24 Months	HD2JX	\$10,939.00	\$10,939.00	\$10,939.00	\$10,939.00
-per DS3	HD8JX	\$65.00	\$65.00	\$65.00	\$65.00
36 Months	HD2KX	\$10,507.00	\$10,507.00	\$10,507.00	\$10,507.00
-per DS3	HD8KX	\$62.00	\$62.00	\$62.00	\$62.00
60 Months	HD2LX	\$9,355.00	\$9,355.00	\$9,355.00	\$9,355.00
-per DS3	HD8LX	\$55.00	\$55.00	\$55.00	\$55.00
120 Months	HD2MX	\$9,355.00	\$9,355.00	\$9,355.00	\$9,355.00
-per DS3	HD8MX	\$55.00	\$55.00	\$55.00	\$55.00

Multiplexing

DS3 to DS1:

	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
Monthly	MQ3	\$300.00	\$300.00	\$300.00	\$300.00
12 Mos.	MKMTX	\$290.00	\$290.00	\$290.00	\$290.00
Vintage 3		\$247.00	\$247.00	\$247.00	\$247.00
24 Mos.	MKM2X	\$285.00	\$285.00	\$285.00	\$285.00
Vintage 3		\$240.00	\$240.00	\$240.00	\$240.00
36 Mos.	MKM3X	\$270.00	\$270.00	\$270.00	\$270.00
Vintage 3		\$230.00	\$230.00	\$230.00	\$230.00
60 Mos.	MKM5X	\$240.00	\$240.00	\$240.00	\$240.00
Vintage 3		\$204.00	\$204.00	\$204.00	\$204.00
120 Mos.	MKM1X	\$240.00	\$240.00	\$240.00	\$240.00
Vintage 3		\$204.00	\$204.00	\$204.00	\$204.00

Private Line DS3 Cross Connect	TYLEA	\$52.50
Switched DS3 Cross Connect	TYLGA	\$52.50

Transport Channels

1. Monthly

Mileage Bands	USOC	Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
	0 1U5U1	-Fixed -Per Mile	- -	- -	- -	- -
Over 0 to 8	1U5U2	-Fixed -Per Mile	\$310.00 \$43.00	\$310.00 \$43.00	\$310.00 \$43.00	\$310.00 \$43.00
Over 8 to 25	1U5U3	-Fixed -Per Mile	\$350.00 \$43.00	\$350.00 \$43.00	\$350.00 \$43.00	\$350.00 \$43.00
Over 25 to 50	1U5U4	-Fixed -Per Mile	\$380.00 \$44.00	\$380.00 \$44.00	\$380.00 \$44.00	\$380.00 \$44.00
Over 50	1U5U5	-Fixed -Per Mile	\$410.00 \$50.00	\$410.00 \$50.00	\$410.00 \$50.00	\$410.00 \$50.00

2. 12 Months

Mileage Bands	USOC	-Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
	0 1U541	-Fixed -Per Mile	- -	- -	- -	- -
Over 0 to 8	1U542	-Fixed -Per Mile Vintage 2	\$301.00 \$42.00 \$40.00	\$301.00 \$42.00 \$40.00	\$301.00 \$42.00 \$40.00	\$301.00 \$42.00 \$40.00
Over 8 to 25	1U543	-Fixed -Per Mile Vintage 2	\$340.00 \$42.00 \$40.00	\$340.00 \$42.00 \$40.00	\$340.00 \$42.00 \$40.00	\$340.00 \$42.00 \$40.00
Over 25 to 50	1U544	-Fixed -Per Mile Vintage 2	\$369.00 \$43.00 \$41.00	\$369.00 \$43.00 \$41.00	\$369.00 \$43.00 \$41.00	\$369.00 \$43.00 \$41.00

3. 24 Months

Mileage Bands	USOC	-Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
	0 1U551	-Fixed -Per Mile	0 -	- -	- -	- -
Over 0 to 8	1U552	-Fixed -Per Mile Vintage 2	\$291.00 \$40.00 \$38.00	\$291.00 \$40.00 \$38.00	\$291.00 \$40.00 \$38.00	\$291.00 \$40.00 \$38.00
Over 8 to 25	1U553	-Fixed -Per Mile Vintage 2	\$329.00 \$40.00 \$38.00	\$329.00 \$40.00 \$38.00	\$329.00 \$40.00 \$38.00	\$329.00 \$40.00 \$38.00
Over 25 to 50	1U554	-Fixed -Per Mile Vintage 2	\$357.00 \$41.00 \$39.00	\$357.00 \$41.00 \$39.00	\$357.00 \$41.00 \$39.00	\$357.00 \$41.00 \$39.00
Over 50	1U555	-Fixed -Per Mile Vintage 2	\$385.00 \$47.00 \$45.00	\$385.00 \$47.00 \$45.00	\$385.00 \$47.00 \$45.00	\$385.00 \$47.00 \$45.00

4. 36 Months

Mileage Bands	USOC	-Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
	0 1U5V1	-Fixed -Per Mile	- -	- -	- -	- -
Over 0 to 8	1U5V2	-Fixed -Per Mile Vintage 2	\$279.00 \$39.00 \$37.00	\$279.00 \$39.00 \$37.00	\$279.00 \$39.00 \$37.00	\$279.00 \$39.00 \$37.00
Over 8 to 25	1U5V3	-Fixed -Per Mile Vintage 2	\$315.00 \$39.00 \$37.00	\$315.00 \$39.00 \$37.00	\$315.00 \$39.00 \$37.00	\$315.00 \$39.00 \$37.00
Over 25 to 50	1U5V4	-Fixed -Per Mile Vintage 2	\$342.00 \$40.00 \$38.00	\$342.00 \$40.00 \$38.00	\$342.00 \$40.00 \$38.00	\$342.00 \$40.00 \$38.00

Over 50	1U545	-Fixed	\$398.00	\$398.00	\$398.00	\$398.00
		-Per Mile	\$49.00	\$49.00	\$49.00	\$49.00
		Vintage 2	\$47.00	\$47.00	\$47.00	\$47.00

Vintage 2 in effect 3/29/98 through 6/30/98

5. 60 Months

Mileage Bands	USOC	-Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
0	1U5Z1	-Fixed	-	-	-	-
		-Per Mile	-	-	-	-
Over 0 to 8	1U5Z2	-Fixed	\$248.00	\$248.00	\$248.00	\$248.00
		-Per Mile	\$34.00	\$34.00	\$34.00	\$34.00
		Vintage 2	\$32.00	\$32.00	\$32.00	\$32.00
Over 8 to 25	1U5Z3	-Fixed	\$280.00	\$280.00	\$280.00	\$280.00
		-Per Mile	\$34.00	\$34.00	\$34.00	\$34.00
		Vintage 2	\$32.00	\$32.00	\$32.00	\$32.00
Over 25 to 50	1U5Z4	-Fixed	\$304.00	\$304.00	\$304.00	\$304.00
		-Per Mile	\$35.00	\$35.00	\$35.00	\$35.00
		Vintage 2	\$33.00	\$33.00	\$33.00	\$33.00
Over 50	1U5Z5	-Fixed	\$328.00	\$328.00	\$328.00	\$328.00
		-Per Mile	\$40.00	\$40.00	\$40.00	\$40.00
		Vintage 2	\$38.00	\$38.00	\$38.00	\$38.00

Entrance Facility

	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
DS3 - Electrical Interface					
-Monthly	EF2CX	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
-12 Mos. Vintage 4	EF2CX	N/A	\$1,455.00 \$1,310.00	\$1,455.00 \$1,310.00	\$1,455.00 \$1,310.00
-24 Mos. Vintage 4	EF2CX	N/A	\$1,425.00 \$1,269.00	\$1,425.00 \$1,269.00	\$1,425.00 \$1,269.00
-36 Mos. Vintage 4	EF2CX	N/A	\$1,350.00 \$1,215.00	\$1,350.00 \$1,215.00	\$1,350.00 \$1,215.00
-60 Mos.	EF2CX	N/A	\$1,200.00	\$1,200.00	\$1,200.00

Over 50	1U5V5	-Fixed	\$369.00	\$369.00	\$369.00	\$369.00
		-Per Mile	\$45.00	\$45.00	\$45.00	\$45.00
		Vintage 2	\$43.00	\$43.00	\$43.00	\$43.00

6. 120 Months

Mileage Bands	USOC	-Mileage Bands per DS3	Non Plan	Monthly Rate Zone 1	Zone 2	Zone 3
0	1U531	-Fixed	-	-	-	-
		-Per Mile	-	-	-	-
Over 0 to 8	1U532	-Fixed	\$248.00	\$248.00	\$248.00	\$248.00
		-Per Mile	\$34.00	\$34.00	\$34.00	\$34.00
		Vintage 2	\$32.00	\$32.00	\$32.00	\$32.00
Over 8 to 25	1U533	-Fixed	\$280.00	\$280.00	\$280.00	\$280.00
		-Per Mile	\$34.00	\$34.00	\$34.00	\$34.00
		Vintage 2	\$32.00	\$32.00	\$32.00	\$32.00
Over 25 to 50	1U534	-Fixed	\$304.00	\$304.00	\$304.00	\$304.00
		-Per Mile	\$35.00	\$35.00	\$35.00	\$35.00
		Vintage 2	\$33.00	\$33.00	\$33.00	\$33.00
Over 50	1U535	-Fixed	\$328.00	\$328.00	\$328.00	\$328.00
		-Per Mile	\$40.00	\$40.00	\$40.00	\$40.00
		Vintage 2	\$38.00	\$38.00	\$38.00	\$38.00

Vintage 2 in effect 3/29/98 through 6/30/98

Vintage 4			\$1,080.00	\$1,080.00	\$1,080.00
-120 Mos.	EF2CX	N/A	\$1,200.00	\$1,200.00	\$1,200.00
Vintage 4			\$1,080.00	\$1,080.00	\$1,080.00
-Capacity of Two - Per Capacity					
-Monthly	EF2PX	N/A	\$1,936.00	\$1,936.00	\$1,936.00
-12 Mos.	EF2PX	N/A	\$1,878.00	\$1,878.00	\$1,878.00
-24 Mos.	EF2PX	N/A	\$1,820.00	\$1,820.00	\$1,820.00
-36 Mos.	EF2PX	N/A	\$1,742.00	\$1,742.00	\$1,742.00
-60 Mos.	EF2PX	N/A	\$1,549.00	\$1,549.00	\$1,549.00
-120 Mos.	EF2PX	N/A	\$1,549.00	\$1,549.00	\$1,549.00
-Capacity of Two - Per DS3					
-Monthly	EF2CX	N/A	\$160.00	\$160.00	\$160.00
-12 Mos.	EF2CX	N/A	\$155.00	\$155.00	\$155.00
-24 Mos.	EF2CX	N/A	\$150.00	\$150.00	\$150.00
-36 Mos.	EF2CX	N/A	\$144.00	\$144.00	\$144.00
-60 Mos.	EF2CX	N/A	\$128.00	\$128.00	\$128.00
-120 Mos.	EF2CX	N/A	\$128.00	\$128.00	\$128.00
-Capacity of Three - Per Capacity					
-Monthly	EF2PX	N/A	\$2,295.00	\$2,295.00	\$2,295.00
-12 Mos.	EF2PX	N/A	\$2,227.00	\$2,227.00	\$2,227.00
-24 Mos.	EF2PX	N/A	\$2,157.00	\$2,157.00	\$2,157.00
-36 Mos.	EF2PX	N/A	\$2,066.00	\$2,066.00	\$2,066.00
-60 Mos.	EF2PX	N/A	\$1,836.00	\$1,836.00	\$1,836.00
-120 Mos.	EF2PX	N/A	\$1,836.00	\$1,836.00	\$1,836.00
-Capacity of Three - Per DS3					
-Monthly	EF2CX	N/A	\$133.00	\$133.00	\$133.00
-12 Mos.	EF2CX	N/A	\$129.00	\$129.00	\$129.00
-24 Mos.	EF2CX	N/A	\$125.00	\$125.00	\$125.00
-36 Mos.	EF2CX	N/A	\$120.00	\$120.00	\$120.00
-60 Mos.	EF2CX	N/A	\$106.00	\$106.00	\$106.00
-120 Mos.	EF2CX	N/A	\$106.00	\$106.00	\$106.00
-Capacity of Six - Per Capacity					
-Monthly	EF2PX	N/A	\$6,582.00	\$6,582.00	\$6,582.00
-12 Mos.	EF2PX	N/A	\$6,385.00	\$6,385.00	\$6,385.00
-24 Mos.	EF2PX	N/A	\$6,187.00	\$6,187.00	\$6,187.00
-36 Mos.	EF2PX	N/A	\$5,923.00	\$5,923.00	\$5,923.00
-60 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00
-120 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00
-Capacity of Six - Per DS3					
-Monthly	EF2CX	N/A	\$81.00	\$81.00	\$81.00
-12 Mos.	EF2CX	N/A	\$79.00	\$79.00	\$79.00
-24 Mos.	EF2CX	N/A	\$76.00	\$76.00	\$76.00
-36 Mos.	EF2CX	N/A	\$73.00	\$73.00	\$73.00
-60 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00
-120 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00

-Capacity of Nine - Per Capacity

-Monthly	EF2PX	N/A	\$6,582.00	\$6,582.00	\$6,582.00
-12 Mos.	EF2PX	N/A	\$6,385.00	\$6,385.00	\$6,385.00
-24 Mos.	EF2PX	N/A	\$6,187.00	\$6,187.00	\$6,187.00
-36 Mos.	EF2PX	N/A	\$5,923.00	\$5,923.00	\$5,923.00
-60 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00
-120 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00

-Capacity of Nine - Per DS3

-Monthly	EF2CX	N/A	\$81.00	\$81.00	\$81.00
-12 Mos.	EF2CX	N/A	\$79.00	\$79.00	\$79.00
-24 Mos.	EF2CX	N/A	\$76.00	\$76.00	\$76.00
-36 Mos.	EF2CX	N/A	\$73.00	\$73.00	\$73.00
-60 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00
-120 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00

-Capacity of Twelve - Per Capacity

-Monthly	EF2PX	N/A	\$6,582.00	\$6,582.00	\$6,582.00
-12 Mos.	EF2PX	N/A	\$6,385.00	\$6,385.00	\$6,385.00
-24 Mos.	EF2PX	N/A	\$6,187.00	\$6,187.00	\$6,187.00
-36 Mos.	EF2PX	N/A	\$5,923.00	\$5,923.00	\$5,923.00
-60 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00
-120 Mos.	EF2PX	N/A	\$5,265.00	\$5,265.00	\$5,265.00

-Capacity of Twelve - Per DS3

-Monthly	EF2CX	N/A	\$81.00	\$81.00	\$81.00
-12 Mos.	EF2CX	N/A	\$79.00	\$79.00	\$79.00
-24 Mos.	EF2CX	N/A	\$76.00	\$76.00	\$76.00
-36 Mos.	EF2CX	N/A	\$73.00	\$73.00	\$73.00
-60 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00
-120 Mos.	EF2CX	N/A	\$67.00	\$67.00	\$67.00

-Capacity of Twenty-Four - Per Capacity

-Monthly	EF2PX	N/A	\$12,850.00	\$12,850.00	\$12,850.00
-12 Mos.	EF2PX	N/A	\$12,465.00	\$12,465.00	\$12,465.00
-24 Mos.	EF2PX	N/A	\$12,079.00	\$12,079.00	\$12,079.00
-36 Mos.	EF2PX	N/A	\$11,565.00	\$11,565.00	\$11,565.00
-60 Mos.	EF2PX	N/A	\$10,280.00	\$10,280.00	\$10,280.00
-120 Mos.	EF2PX	N/A	\$10,280.00	\$10,280.00	\$10,280.00

-Capacity of Twenty-Four - Per DS3

-Monthly	EF2CX	N/A	\$87.00	\$87.00	\$87.00
-12 Mos.	EF2CX	N/A	\$84.00	\$84.00	\$84.00
-24 Mos.	EF2CX	N/A	\$82.00	\$82.00	\$82.00
-36 Mos.	EF2CX	N/A	\$79.00	\$79.00	\$79.00
-60 Mos.	EF2CX	N/A	\$70.00	\$70.00	\$70.00
-120 Mos.	EF2CX	N/A	\$70.00	\$70.00	\$70.00

-Capacity of Thirty-Six - Per Capacity

-Monthly	EF2PX	N/A	\$21,883.00	\$21,883.00	\$21,883.00
-12 Mos.	EF2PX	N/A	\$21,212.00	\$21,212.00	\$21,212.00
-24 Mos.	EF2PX	N/A	\$20,539.00	\$20,539.00	\$20,539.00
-36 Mos.	EF2PX	N/A	\$19,675.00	\$19,675.00	\$19,675.00
-60 Mos.	EF2PX	N/A	\$17,515.00	\$17,515.00	\$17,515.00
-120 Mos.	EF2PX	N/A	\$17,515.00	\$17,515.00	\$17,515.00

-Capacity of Thirty-Six - Per DS3

-Monthly	EF2CX	N/A	\$97.00	\$97.00	\$97.00
-12 Mos.	EF2CX	N/A	\$94.00	\$94.00	\$94.00
-24 Mos.	EF2CX	N/A	\$91.00	\$91.00	\$91.00
-36 Mos.	EF2CX	N/A	\$87.00	\$87.00	\$87.00
-60 Mos.	EF2CX	N/A	\$78.00	\$78.00	\$78.00
-120 Mos.	EF2CX	N/A	\$78.00	\$78.00	\$78.00

DS3 - Optical Interface

	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
-Capacity of Two - Per Cap					
-Monthly	EF2LX	N/A	\$1,747.00	\$1,747.00	\$1,747.00
-12 Mos.	EF2LX	N/A	\$1,695.00	\$1,695.00	\$1,695.00
-24 Mos.	EF2LX	N/A	\$1,642.00	\$1,642.00	\$1,642.00
-36 Mos.	EF2LX	N/A	\$1,572.00	\$1,572.00	\$1,572.00
-60 Mos.	EF2LX	N/A	\$1,398.00	\$1,398.00	\$1,398.00
-120 Mos.	EF2LX	N/A	\$1,398.00	\$1,398.00	\$1,398.00

-Capacity of Two - Per DS3

-Monthly	EF2DX	\$943.50	\$70.00	\$70.00	\$70.00
-12 Mos.	EF2DX	N/A	\$68.00	\$68.00	\$68.00
-24 Mos.	EF2DX	N/A	\$66.00	\$66.00	\$66.00
-36 Mos.	EF2DX	N/A	\$63.00	\$63.00	\$63.00
-60 Mos.	EF2DX	N/A	\$56.00	\$56.00	\$56.00
-120 Mos.	EF2DX	N/A	\$56.00	\$56.00	\$56.00

-Capacity of Three - Per Capacity

-Monthly	EF2LX	N/A	\$1,747.00	\$1,747.00	\$1,747.00
-12 Mos.	EF2LX	N/A	\$1,695.00	\$1,695.00	\$1,695.00
-24 Mos.	EF2LX	N/A	\$1,642.00	\$1,642.00	\$1,642.00
-36 Mos.	EF2LX	N/A	\$1,572.00	\$1,572.00	\$1,572.00
-60 Mos.	EF2LX	N/A	\$1,398.00	\$1,398.00	\$1,398.00
-120 Mos.	EF2LX	N/A	\$1,398.00	\$1,398.00	\$1,398.00

-Capacity of Three - Per DS3

-Monthly	EF2DX	N/A	\$70.00	\$70.00	\$70.00
-12 Mos.	EF2DX	N/A	\$68.00	\$68.00	\$68.00
-24 Mos.	EF2DX	N/A	\$66.00	\$66.00	\$66.00
-36 Mos.	EF2DX	N/A	\$63.00	\$63.00	\$63.00
-60 Mos.	EF2DX	N/A	\$56.00	\$56.00	\$56.00
-120 Mos.	EF2DX	N/A	\$56.00	\$56.00	\$56.00

-Capacity of Six - Per Capacity

-Monthly	EF2LX	N/A	\$3,691.00	\$3,691.00	\$3,691.00
-12 Mos.	EF2LX	N/A	\$3,581.00	\$3,581.00	\$3,581.00
-24 Mos.	EF2LX	N/A	\$3,469.00	\$3,469.00	\$3,469.00
-36 Mos.	EF2LX	N/A	\$3,321.00	\$3,321.00	\$3,321.00
-60 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00
-120 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00

-Capacity of Six - Per DS3

-Monthly	EF2DX	N/A	\$40.00	\$40.00	\$40.00
-12 Mos.	EF2DX	N/A	\$39.00	\$39.00	\$39.00

-24 Mos.	EF2DX	N/A	\$38.00	\$38.00	\$38.00
-36 Mos.	EF2DX	N/A	\$36.00	\$36.00	\$36.00
-60 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-120 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-Capacity of Nine - Per Capacity					
-Monthly	EF2LX	N/A	\$3,691.00	\$3,691.00	\$3,691.00
-12 Mos.	EF2LX	N/A	\$3,581.00	\$3,581.00	\$3,581.00
-24 Mos.	EF2LX	N/A	\$3,469.00	\$3,469.00	\$3,469.00
-36 Mos.	EF2LX	N/A	\$3,321.00	\$3,321.00	\$3,321.00
-60 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00
-120 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00
-Capacity of Nine - Per DS3					
-Monthly	EF2DX	N/A	\$40.00	\$40.00	\$40.00
-12 Mos.	EF2DX	N/A	\$39.00	\$39.00	\$39.00
-24 Mos.	EF2DX	N/A	\$38.00	\$38.00	\$38.00
-36 Mos.	EF2DX	N/A	\$36.00	\$36.00	\$36.00
-60 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-120 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-Capacity of Twelve - Per Capacity					
-Monthly	EF2LX	N/A	\$3,691.00	\$3,691.00	\$3,691.00
-12 Mos.	EF2LX	N/A	\$3,581.00	\$3,581.00	\$3,581.00
-24 Mos.	EF2LX	N/A	\$3,469.00	\$3,469.00	\$3,469.00
-36 Mos.	EF2LX	N/A	\$3,321.00	\$3,321.00	\$3,321.00
-60 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00
-120 Mos.	EF2LX	N/A	\$2,952.00	\$2,952.00	\$2,952.00
-Capacity of Twelve - Per DS3					
-Monthly	EF2DX	N/A	\$40.00	\$40.00	\$40.00
-12 Mos.	EF2DX	N/A	\$39.00	\$39.00	\$39.00
-24 Mos.	EF2DX	N/A	\$38.00	\$38.00	\$38.00
-36 Mos.	EF2DX	N/A	\$36.00	\$36.00	\$36.00
-60 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-120 Mos.	EF2DX	N/A	\$34.00	\$34.00	\$34.00
-Capacity of Eighteen - Per Capacity					
-Monthly	EF2LX	N/A	\$7,250.00	\$7,250.00	\$7,250.00
-12 Mos.	EF2LX	N/A	\$7,033.00	\$7,033.00	\$7,033.00
-24 Mos.	EF2LX	N/A	\$6,815.00	\$6,815.00	\$6,815.00
-36 Mos.	EF2LX	N/A	\$6,525.00	\$6,525.00	\$6,525.00
-60 Mos.	EF2LX	N/A	\$5,800.00	\$5,800.00	\$5,800.00
-120 Mos.	EF2LX	N/A	\$5,800.00	\$5,800.00	\$5,800.00
-Capacity of Eighteen - Per DS3					
-Monthly	EF2DX	N/A	\$52.00	\$52.00	\$52.00
-12 Mos.	EF2DX	N/A	\$50.00	\$50.00	\$50.00
-24 Mos.	EF2DX	N/A	\$49.00	\$49.00	\$49.00
-36 Mos.	EF2DX	N/A	\$47.00	\$47.00	\$47.00
-60 Mos.	EF2DX	N/A	\$42.00	\$42.00	\$42.00
-120 Mos.	EF2DX	N/A	\$42.00	\$42.00	\$42.00

-Capacity of Twenty-Four - Per Capacity

-Monthly	EF2LX	N/A	\$7,250.00	\$7,250.00	\$7,250.00
-12 Mos.	EF2LX	N/A	\$7,033.00	\$7,033.00	\$7,033.00
-24 Mos.	EF2LX	N/A	\$6,815.00	\$6,815.00	\$6,815.00
-36 Mos.	EF2LX	N/A	\$6,525.00	\$6,525.00	\$6,525.00
-60 Mos.	EF2LX	N/A	\$5,800.00	\$5,800.00	\$5,800.00
-120 Mos.	EF2LX	N/A	\$5,800.00	\$5,800.00	\$5,800.00

-Capacity of Twenty-Four - Per DS3

-Monthly	EF2DX	N/A	\$52.00	\$52.00	\$52.00
-12 Mos.	EF2DX	N/A	\$50.00	\$50.00	\$50.00
-24 Mos.	EF2DX	N/A	\$49.00	\$49.00	\$49.00
-36 Mos.	EF2DX	N/A	\$47.00	\$47.00	\$47.00
-60 Mos.	EF2DX	N/A	\$42.00	\$42.00	\$42.00
-120 Mos.	EF2DX	N/A	\$42.00	\$42.00	\$42.00

-Capacity of Thirty-Six - Per Capacity

-Monthly	EF2LX	N/A	\$11,659.00	\$11,659.00	\$11,659.00
-12 Mos.	EF2LX	N/A	\$11,324.00	\$11,324.00	\$11,324.00
-24 Mos.	EF2LX	N/A	\$10,939.00	\$10,939.00	\$10,939.00
-36 Mos.	EF2LX	N/A	\$10,507.00	\$10,507.00	\$10,507.00
-60 Mos.	EF2LX	N/A	\$9,355.00	\$9,355.00	\$9,355.00
-120 Mos.	EF2LX	N/A	\$9,355.00	\$9,355.00	\$9,355.00

-Capacity of Thirty-Six - Per DS3

-Monthly	EF2DX	N/A	\$69.00	\$69.00	\$69.00
-12 Mos.	EF2DX	N/A	\$67.00	\$67.00	\$67.00
-24 Mos.	EF2DX	N/A	\$65.00	\$65.00	\$65.00
-36 Mos.	EF2DX	N/A	\$62.00	\$62.00	\$62.00
-60 Mos.	EF2DX	N/A	\$55.00	\$55.00	\$55.00
-120 Mos.	EF2DX	N/A	\$55.00	\$55.00	\$55.00

Direct-Trunked Transport

	USOC	Non-Plan	Zone 1	Zone 2	Zone 3
*Mileage Bands - Fixed					
- 0	1YTXA	N/A	N/A	N/A	N/A
- Over 0 to 8	1YTXB	\$714.84	\$310.00	\$310.00	\$310.00
- Over 8 to 25	1YTXC	\$714.84	\$350.00	\$350.00	\$350.00
- Over 25 to 50	1YTXD	\$714.84	\$380.00	\$380.00	\$380.00
- Over 50	1YTXE	\$805.44	\$410.00	\$410.00	\$410.00
*Mileage Bands - Per Mile					
- 0	1YTXA	N/A	N/A	N/A	N/A
- Over 0 to 8	1YTXB	\$78.90	\$43.00	\$43.00	\$43.00
- Over 8 to 25	1YTXC	\$78.90	\$43.00	\$43.00	\$43.00
- Over 25 to 50	1YTXD	\$80.73	\$44.00	\$44.00	\$44.00
- Over 50	1YTXE	\$91.74	\$50.00	\$50.00	\$50.00

Multiplexing

Entrance Facilit MKW3X	\$300.00	\$300.00	\$300.00	\$300.00
------------------------	----------	----------	----------	----------

*Direct-Trunked Transport - DS3 to DS1

Monthly	M6W3X	\$300.00	\$300.00	\$300.00	\$300.00
12 Month plan	M6W3X	\$300.00	\$300.00	\$300.00	\$300.00
Vintage 4		\$246.00	\$246.00	\$246.00	\$246.00
Vintage 5		\$247.00	\$247.00	\$247.00	\$247.00
24 Month plan	M6W3X	\$285.00	\$285.00	\$285.00	\$285.00
Vintage 4		\$239.00	\$239.00	\$239.00	\$239.00
Vintage 5		\$240.00	\$240.00	\$240.00	\$240.00
36 Month plan	M6W3X	\$270.00	\$270.00	\$270.00	\$270.00
Vintage 4		\$229.00	\$229.00	\$229.00	\$229.00
Vintage 5		\$230.00	\$230.00	\$230.00	\$230.00
60 Month plan	M6W3X	\$240.00	\$240.00	\$240.00	\$240.00
Vintage 4		\$203.00	\$203.00	\$203.00	\$203.00
Vintage 5		\$204.00	\$204.00	\$204.00	\$204.00
120 Month plan	M6W3X	\$240.00	\$240.00	\$240.00	\$240.00
Vintage 4		\$203.00	\$203.00	\$203.00	\$203.00
Vintage 5		\$204.00	\$204.00	\$204.00	\$204.00

Vintage 4 in effect 3/29/98 through 4/1/98

Vintage 5 in effect 4/2/98 through 6/30/98